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Automotive Daily News

★CARS★ SHOP EQUIPMENT TRUCKS ★★AVIATION★★ PARTS ACCESSORIES ★TIRES★

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SMALL GAIN IN 1931 EXPORTS SEEN

Bright Employment Outlook Seen by Labor Department On Basis of August Survey

Arrival of September Finds Upward Tendency Apparent in Automotive, Iron and Steel Plants; Predict Big Gain in Next 30 Days

By FRANCIS P. DAILY

WASHINGTON, Sept. 12.—There was little change in the volume of employment maintained throughout the country in the last month, but a brighter outlook developed with the arrival of September in regard to industrial prospects for the next thirty to sixty days.

While operations continued on a curtailed basis in the automotive and iron and steel plants during August, there was an upward tendency apparent toward the close of the month in certain branches of the latter industry, the Department of Labor announced today.

There was some improvement reported in the industrial situation in Michigan with a corresponding increase in employment. However, curtailed schedules obtained in the automobile and accessories factories.

In Detroit all plants were in operation, many on part-time schedules with curtailed forces engaged. An influx of transient help contributed to the oversupply of workers. All factories in Kalamazoo were in operation, but part time prevailed in automobile and accessory plants.

The surplus of workers usually employed in the automobile industry in Flint contributed mainly to the number of unemployed at the end of the month. All plants in Flint were in operation. However, several worked on curtailed schedules, with reduced forces. Certain departments of an automobile factory reported overtime.

Plant and factory operations in Lansing continued on part time basis. However, several branches of the automobile industry anticipate considerable improvement in the next thirty days.

With curtailed schedules in most

(Continued on Page 4)

DURANT OFFERS LARGE FOUR-CYLINDER CAR

Lansing, Mich., Sept. 12.—Durant Motors, Inc., today announced a new four-cylinder car, with delivery to start in a week. The new car is declared to be the largest four on the market, with an L head engine developing fifty horse power at 2,800 revolutions and 200 cubic inch piston displacement. It has a 3⅞ inch bore and 4¼ inch stroke.

The new Durant will be offered

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S. P. A. OFFERS DE LUXE CABS, STANDARD BODIES FOR STUDEBAKER TRUCK

South Bend, Ind., Sept. 12.—A de luxe all-weather cab and a full line of standard bodies are available on the new Studebaker 1½ and two-ton truck chassis recently announced by S. P. A. Truck Corporation. Bodies include panel, screen, express, stake, canopy, grain, cattle and dump types.

Ruggedness has been combined with style in cab and bodies. Cab

(Continued on Page 7)

WILLIAM L. COLT TO HEAD DODGE NEW YORK, INC.

New York, Sept. 12.—William L. Colt, a pioneer on New York's automobile row, formerly president of the Colt Stewart Company, has been named president and general manager of Dodge New York, Inc., 125 West End Ave., according to an announcement here today.

W. L. Colt

In his new position Mr. Colt will have complete charge of all Dodge activities.

INDUSTRY LOOKS TO HOME MARKET FOR ANY UPTURN

Foreign Business, However, Assumes Greater Importance Than in the Past; Overseas Assembly Plants Effective

NEW YORK, Sept. 12.—In the present condition of American industry, it is felt here that export business assumes even greater importance than it has in the past. The export field provides one of the fertile locations for the development and increase of automotive business, but from the fact that the present depression is world wide and also because of the unfavorable effect of our new tariff law, motor exports this year have fallen off to a serious degree. At the present time foreign markets are absorbing a small proportion of the decreased domestic and Canadian output of motor vehicle units and parts.

While leading automotive executives are confident of better business in 1931 than has been had this year, they are generally not sanguine of greatly increased export business next year.

In a copyrighted story released today by the New York News Bureau, a number of prominent executives of automotive companies are quoted regarding export prospects for the immediate future.

Alfred P. Sloan, Jr., president of General Motors Corporation, states: "It must be remembered that not only this country but practically all countries in the world, with the exception perhaps of France, are in much the same condition, and in some cases even more adversely affected than we are here."

On the foreign situation M. A. O'Mara, president of Brockway Motor Truck Corporation, says: "The demand in foreign markets has been affected to such an extent that I do not believe any substantial evidence of improvement can be expected for another year."

E. S. Gorrell, president of Stutz Motor Car Company, also speaks in the same vein, saying: "The business depression through which we are now passing is not only national in its scope but international."

M. L. Pulcher, president of Fed-

(Continued on Page 2)

NEW NASH LINE OUT SHORTLY, IS RUMOR

Kenosha, Wis., Sept. 12.—Rumors emanating from sources deemed reliable are to the effect that the Nash Motors Company will soon make an important announcement of a new line of motor cars. For some time past the industry and the trade have been looking for some such pronouncement by Nash. This interest is especially strong because of the reputation of the Nash organization for meeting merchandising conditions in a most masterful way.

While details are lacking, the reports current have reference to a new low-priced eight by Nash and the probability that this car will be the lowest priced eight in the world. Besides this car, it is said that there will be two other eights, one in the moderate-priced field and one selling at a medium price.

Perhaps the most interesting of the rumors relating to Nash plans has to do with a low-priced six-cylinder car—the lowest priced car Nash has ever built. From various sources it has been learned that shipments of this new six are already being made and that it is being eagerly ordered by Nash dealers.

INCREASING TAX BURDENS MENACE MOTOR INDUSTRY

NEW YORK, Sept. 12.—"Expanding use of motor vehicles is menaced by the tendency toward burdensome taxes and excess regulation," declared Alfred Reeves, general manager of the National Automobile Chamber of Commerce, in his address before the Automotive Service Association of New York last night.

With the opposition to increased taxes, which now exceed an average of $30 annually for the privilege of driving a car, there comes a demand for more sensible regulations to make the driving of a motor car more a pleasure than a task.

After telling of new plans for improved service adopted by factories and dealers, together with the requirements of the service man and the service station in the future, Mr. Reeves expressed strong opposition to the cry for more taxes on the motorist and more regulation. He insisted that all taxes collected

(Continued on Page 2)

Austin Car Owners Laud Performance of New Unit

Butler, Pa., Sept. 12.—With the advance cohorts of bantam Austins now scurrying over American highways, reports of consumer "road tests" are beginning to flood the offices of the American Austin Car Company, according to C. A. Best, general sales manager.

"We have been claiming that the bantam Austin will do forty miles to the gallon," Mr. Best remarks, "but letters from owners who are driving Austins indicate that more than fifty miles to the gallon is not unusual.

"The bantam Austin has already navigated Pikes Peak on less than a gallon of gasoline. The trip, a trial run made by E. J. Negy of Denver in his new bantam, was checked by a reporter from a Denver newspaper who went along. The course was from Colorado Springs to the summit, 14,110 feet above sea level. After this test run—made in high—the Austin was driven 76.8 miles from Colorado Springs to

(Continued on Page 7)

H. W. ROLAND TO HEAD REO TRUCK SALES

Detroit, Sept. 12.—Harold W. Roland has retired as general sales manager and member of the board of directors of the Ajax Rubber Company of Racine, Wis., and the McLaren Rubber Company of Charlotte, N. C., to become manager of truck sales for the Reo Motor Car Company, according to an announcement made today by Elijah G. Poxson, general sales manager of Reo.

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Louisville, Ky., Used Car Holdings Hit Low Mark

LOUISVILLE, Ky., Sept. 12.—**The monthly used car sales and stock report of Secretary J. Garland Lea, Louisville Automobile Dealers Association, gives some interesting information. For one thing, it shows stock on hand of 1,090 used cars, the very lowest of the year, and within a few cars of being the lowest in two years.**

Another interesting feature is that the inventory average of the 1,090 cars is down to $272.

Sales in August were very fair as far as numbers go, with a total of 775 cars moved, but at an average of but $216.12, the lowest average sale price of used cars as shown in figures going back two years, and in fact many years. For the first time in many months the association dealers have less than $300,000 as a used car inventory.

Another report on repossessions shows that 406 cars were repossessed by association members for eight

(Continued on Page 4)

BRITISH TIRE EXPORTS SHOW DECLINE IN JULY

Washington, Sept. 12.—Exports of automobile casings from the United Kingdom during July totaled 130,477, as compared with 105,108 in the previous month, the rubber division of the Department of Commerce announced today.

Reeves Sees Tax Burden As Menace to Industry

(Continued From Page 1)

from motorists should be used for highway improvement, and that sensible law enforcement is needed in preference to any more senseless regulations.

"During the past few years there has been a growing concern over the increasing efforts of politicians to pluck those who operate these modern vehicles of transportation," said Mr. Reeves, "and especially when the fees taken from the motorist are not ear-marked for use on the highway.

"A glaring example is in our own state of New York, where motorists are paying one million and a quarter dollars each week to the state treasury, with no guarantee that all the money will go on the highways.

"New York state registration fees will exceed $40,000,000, with about $25,000,000 from the 2-cent gasoline tax, and yet we hear a clamor for additional taxes on the motor vehicle.

"Under fifteen different kinds of taxes the motorists of this country contributed almost $800,000,000. Generally a big volume calls for lower rates, yet the increased number of motorists—there are now 26,000,000 motor vehicles—has never brought a single decrease.

"These taxes take various forms, including registration fees and taxes on gasoline, franchise, personal property, operator's license, gross income capacity basis, passenger carrying capacity, wheelage, municipal franchise and special county registration.

"Every state started with a low gasoline tax, and then piled it on until in many places there is a 25 per cent. sales tax on the cost of the article. Gas taxes alone last year exceeded $430,000,000," declared the N. A. C. C. manager.

"While taxes on motor cars are admitted to be discriminatory against a special class of citizens, they have been cheerfully accepted when the money was used on the highways. There comes a very definite protest, however, when states use part of the funds for educational purposes, to build state institutions, for street paving or for distribution back to the various localities where the expenditure is hampered by expensive management.

"One of the worst measures passed this year in South Dakota, where as a pre-requisite of registration an owner must show his state tax receipt for 3 per cent. on the cost price of his car. This is a discriminatory sales tax not placed on any other article.

"Motorists approve a reasonable registration fee for regulatory purposes, with gasoline taxes for highway maintenance because the gas tax is a fair measure of the use which one makes of the highways.

"In the case of public vehicles for hire, some additional special tax can be imposed," continued Mr. Reeves.

"We see a tendency to unfairly tax the truck. We are in high accord with the regulation of size, speed and load limits of commercial vehicles, but as factors in the distribution of food and merchandise, they should not be overburdened, because all charges must finally go into the cost of distribution and be paid by the public.

"In the matter of regulation, which is oppressing the motorist, we find the local courts glutted with cases involving trivial traffic violations. Some traffic regulations have become merely clubs in the hands of the police with enforcement depending on their particular temperament.

"Invariably the operator is considered guilty until proved innocent. The average motorist is beginning to believe that piloting a car is almost a criminal offense.

"All organizations having to do with the motor industry or motor user are advocates of strict measures that will make the highway safer, but call for sane laws and sensible enforcement. To improve traffic conditions and to make life less miserable for the motorist, we would therefore suggest the following:—

1. Greater uniformity of traffic regulations based on the Hoover uniform traffic code, and with signs to note exceptions to those rules.
2. Posting of roads where speeds are reduced or increased.
3. More courtesy on the part of traffic officers with full consideration of many aggravating circumstances.
4. Raising ancient speed limits of twenty and twenty-five miles an hour and enforcing them, rather than permitting a greater speed at times, with the threats of arrest at others.
5. More thorough and more honest inspection of applicants for driver privilege, to make certain that none but those properly qualified receive licenses, and others, really capable, are not refused because they decline to pay bribes or tips.
6. Traffic officers should be in full uniform with bright motorcycles, patrolling the highways rather than hiding up side streets to later follow the offending driver. Other highway users are better protected when the police stop violations promptly instead of permitting the motorist to speed for half a mile to make an arrest.
7. Stricter enforcement of the rule to drive to the right.
8. Jail penalties for habitual reckless driving or driving while intoxicated.

LITTLE EXPORT GAIN SEEN FOR NEXT YEAR

(Continued From Page 1)

eral Motor Truck Company, commenting more fully, remarks:

"We are finding considerable unfavorable reaction in our export business. There seems to be a slackening up all over the world, caused by droughts, unfavorable money exchange, strikes, labor troubles, war, uprisings, unfavorable trade balances and last, but not least, increase of American tariff.

"I believe the effect of American tariff is more psychological than real, but many countries objected strenuously to any increase in tariff. America needs a big export business to stabilize itself because we are overproduced in almost every vocation, and, in order to maintain our usual manufacturing activity, we need export business.

"I am hoping the new tariff commission will get into action at once, as I believe this will have a considerable effect on feelings of foreign countries to whom we were shipping great quantities of goods. If there are a few revisions of tariff downward it will be a step in the right direction and will help us very much."

James D. Mooney, president of General Motors Export Company, recently stated his belief that world conditions were such as to suppose business abroad for some time to come would be carried on at much lower pace than during past year.

In connection with export markets some executives call attention to a trend developing in the past few years which may have a decided effect on American producers and their Canadian subsidiaries. This trend is toward the establishment of manufacturing subsidiaries in foreign countries as contrasted with previous practice of shipping to these countries directly from American factories.

It is pointed out that, while such steps are a method of circumventing high import duties imposed by foreign nations still, still a slower buying pace abroad would be reflected by earnings returned by foreign subsidiaries to parent companies. Also the future trend would appear to be that manufacturers who have foreign subsidiaries will tend to secure an increasingly larger percentage of total foreign business, while American manufacturers, competing by shipments from domestic plants, will tend to get increasingly smaller percentage.

F. DORAN, JR., TO HEAD G. M. MANAGERS' CLUB

Dallas, Tex., Sept. 12.—Felix Doran, Jr., Southwest regional manager for the Chevrolet Motor Company, has been elected president of the General Motors Managers' Club. He succeeds Eldred H. Hancock, who has recently been appointed regional manager for the General Motors Acceptance Company. Succeeding Mr. Doran as vice-president of the organization is C. L. Voss, zone manager of the Oakland Motor Car Company.

Mr. Hancock, former Dallas branch manager of the G. M. A. C., has been appointed manager of the newly created region of the finance organization. W. J. Geoffrey succeeds Mr. Hancock as manager of the Dallas branch.

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SPARKS from DETROIT

* * *

Early-Cyclist Days

* * *

By Chris Sinsabaugh

CHALFANT is one of those pioneers who came from the bicycle industry, which recalls the staff of the Sterling Cycle Works of Chicago from which came several young men who later on became powerful in the automobile industry. At that time the Sterling was one of the leading makes and at the head of the company was the late C. W. Dickerson, who for years was vice-president of Timken Axle.

The late Howard E. Raymond was Sterling sales manager, and it will be recalled that Mr. Raymond went far in the automobile field as vice-president of the B. F. Goodrich Company of Akron. On the Sterling sales staff were L. J. Ollier, James Levy and A. W. Warren, while E. P. Chalfant was a department head.

In the automobile field Ollier became vice-president of Studebaker, after having been prominent as a dealer. Now he has Great Britain for Studebaker and is carrying on in a big way on the other side of the Atlantic. Levy became one of the most prominent of Chicago dealers, his debut being with A. G. Spalding, for whom he sold the Knox air cooler, which was little better than a motor tricycle in those days. Now Levy is one of Buick's big dealers and still in Chicago. Warren, in the automobile phase of his career, was a vice-president of Hodgman Rubber of Tuckahoe, N. Y., up to a few years ago. In his automotive past, Chalfant once was Packard's sales manager, and also served as president of the E. R. Thomas Motor Car Company of Buffalo. In recent years he has been identified with the accessory field.

* * *

THAT those old time cyclists are still sprinkled throughout the automobile industry is evidenced by several letters which have come to me since I started writing this column for the Automotive Daily News. One of them is from Arch E. Hughes, president of the Foss-Hughes Company of Philadelphia, handling the Pierce-Arrow., who writes:

"My first meeting with you was on one of the high-wheel runs of the Chicago Cycling Club to Pullman, some time in the late '90s, when 'Pye' Bliss had his little hatchet with which he knocked off the steps on the backbones of the 'ordinaries' which were used for mounting, greatly embarassing those of us who had forgotten how to do the pedal mount.

"I recall well our arrival at Pullman, which is only twelve miles from Chicago, for while we were dining, some of the club's wags, piled up the old wheels and built a bonfire under them. The yells of the villagers brought the diners out and there was a scramble to rescue the wheels. I succeeded in getting mine with twelve spokes broken and I had a devil of a time getting back to Chicago on that wobbly wheel.

"After this I became a traveling salesman for the Western Wheel Works of Chicago, making Crescent bicycles. Shortly after this I entered the automobile business and for the past twenty-five years I have been handling the Pierce-Arrow in Philadelphia."

This Pullman run referred to was an annual event, made on high solid-tired bicycles known as "ordinaries." They had been extinct for years, but the veterans ransacked the cellars each year and dug up these relics just for this short old-time trip. The event might be compared to motoring if the old timers of this industry were in the habit of unearthing the curved-dash Oldsmobiles, the ancient Packards and Pierce-Arrows and making a long trip of about twenty-five miles annually.

* * *

ANOTHER well wisher, who also comes from the bicycle era is George Badenoch of Newark, N. J. We were fellow members of the Chicago Cycling Club and I haven't seen him since those days. He writes that he has been selling Pierce-Arrows for nearly twenty years in Newark and northern New Jersey. Badenoch mentions that Frank Fanning has the Marmon in Newark.

Fanning used to be one of the racing men carrying the colors of the Illinois Cycling Club, a Chicago organization. The automobile bug bit him early and I can recall his career as an automobile manufacturer as far back as 1898. Fanning, however, guessed wrong as to the future motive power of the automobile, for he made an electric carriage instead of one propelled by gasoline.

San Antonio Dealer Holds To One Price in Used Car Appraisals; Finds It Pays

B. C. REBER

"THE principal reason for our success is the basic fixed policies which govern our business," stated C. V. Twyman, vice-president and general manager of Gene Meador, Inc., Packard distribtuor of San Antonio, Tex. "We have certain policies which chart our course and which are followed out to the letter in all our business dealings.

"The first of these is our policy in appraising used cars. Probably the worst problem in the industry today is the appraising of used cars. In our own firm this appraisal is made by a member of the firm, and once a price is set, that price is retained regardless of the customer, offers of other firms, or inducements of other nature.

"We have built our business on public confidence. The man who buys a car every three years gets the same consideration as one who would buy a car a week. The man, woman or child coming into our display rooms is shown the same courtesy. A man may send his colbred chauffeur down with his car to be appraised and rest assured that we will give the same price that we would give the owner.

"Our second policy is to keep our used car stock down to a minimum. We have twenty days' supply on hand, and keep our stock at this maximum. We used caution in taking in cars on trade-ins, and in many instances where we feel that we cannot offer the customer more, we will take the car without any transfer and sell it for all we can get, sending the owner a check at the close of the sale. We send out quite a number of checks in this manner each month.

* * *

"AS an instance of this point, a few weeks ago a customer came in with a car offered as a trade-in on a new Packard. The car was a beautiful model, practically new, and too good to be offered on a trade-in sale. We informed the customer we could not allow what we considered the car was worth, but offered to place it in stock and sell it for all we could get. The customer agreed to this, stating that $2,500 was expected.

"After bargaining around for a while, we were able to sell it for $2,617, sending the customer a check for this amount. In another week this customer came in and bought another Packard, expressing great appreciation for our service.

"Our third policy, which has helped us maintin a profitable business, and a progressive one, is that we demand cash for all service and repair work. We feel that there are enough troubles in the automobile business without having to worry about collecting old accounts, making adjustments after a bill has been past due several months, and charging off old bills each year.

"We use first-class workmen in our shops, and we know that every car that has been serviced is in first class condition when it leaves. It is too common a practice to find fault with workmanship, especially if a bill seems a bit high, or is past due and requires some collection methods. The customer must be satisfied with the work before he takes the car out. He pays cash for the work. And there are no aftermaths.

"We recondition only Packards. A car that has been taken in on a trade is either reconditioned, or not. If it is not, we tell the customer exactly its condition, what may be expected of it, and when replacements will be required. We will clean out the carbon, grind the valves, or do minor repairing and adjusting of this nature, but we do not rebuild.

* * *

"EVERY used car that is sold goes out without any guarantee. When it is offered for sale, we state exactly what may be expected of it. If it is not fit for sale, we would not have it. The fact we are offering it for sale, we consider sufficient proof that it may be expected to give good service. It needs no guarantee. Often these guarantees are but weak promises created to sell, and much grief generally results. When we sell a used car the reputation of this firm is behind, it, which is assurance that the customer will be given a square deal.

"In selling our cars we have a sales staff of high-class men. We do not build up our sales force from men who come into our offices seeking positions, but, instead, look around among other lines of work for high-class men of ability and integrity, who are men we would be proud to have as Packard representatives. When we have found a man that meets our requirements, we approach him with our proposition. If he accepts, we train him, coach him, and give him every bit of assistance we can to make good. After a few months, if it is evident that he will not make a good automotive salesman, we do not condemn him as a bad salesman all around, but help him find a position in a line of work which will interest him, and to which he is more naturally adapted.

* * *

"THROUGH these practices we have been able to show a steady and consistent business. At the present time, although business conditions have been very quiet, our sales for the first six months of 1930 are only 5 per cent. behind those of 1929, which was an excellent year.

"Our annual business volume will exceed $750,000, yet we will only have one or two repossessions during a year; and these are due to conditions which arise after the sale is made and which are generally unavoidable. So far we have not had a repossession this year, although I expect one this week. The car owner is a man of good reputation and integrity, but after the sale was made, he lost his position and has since been unable to make new connections. He brought the car in voluntarily, and it is now on our floor.

"We carry our own paper and watch every car sale that is made to make sure that the purchaser is in a position to own and appreciate a Packard. We never make a sale without getting the full down payment, and all following payments as specified. We do not cheapen our sales by offering any concession in order to make a sale. Such a practice we would consider unworthy of our business and unworthy of the car we sell. We do not condemn such a practice for other dealers, but merely do not follow it out in our business."

CLASSIFIED AD TURNS THE TRICK

Indianapolis Learns Its Value With Aid of Manufacturer

THE story of how L. L. Newby, head of the Newby Motor Company, east side Indianapolis Oldsmobile dealer, learned that newspaper classified advertising was a good medium for disposing of used cars is best told by Mr. Newby's own words.

"I had never been an advertiser until recently the factory allotted each dealer a certain amount of money to be used in advertising his used cars locally," Mr. Newby said. "My portion, while comparatively small, because mine is a small company, was, nevertheless, sufficient to give me good representation in the used car columns over a period of several days, and after inserting several three and four line ads describing the car and its condition along with price my used car sales began to pick up.

"One sale in particular sold me on the value of classified advertising. An ad on a late model car brought a response by telephone from Seymour (a town about sixty-five miles distant) asking the lowest figure on the car and what it needed in the way of mechanical work. I quoted my price and told the man $12 would put the car in first class shape, and the next day his check arrived with a substantial deposit with a letter asking that the necessary work be done by a certain time."

Mr. Newby, who has been a dealer here for several years, employs no salesmen, making all deals himself. He prides himself on a shop force, employing four or five men steadily and guaranteeing all service work. He requires all his mechanics to be high school graduates, claiming added intelligence is an important factor in meeting public desires.

The Service Station of Tomorrow

Photo shows new shop of Lan-C-Air Service, Inc., New Haven, Conn., built to cater to the needs of automobile, marine and airplane servicing. The station has already built up a large business in the automobile end, with excellent prospects in the other two

This Service Station Caters To Cars, Boats and Planes

By CHARLES B. BARR

ANTICIPATING automotive developments of the future, there has been established at 171 Columbus Ave., New Haven, Conn., a service station designed to cater to the needs of automobiles, motorboats and aircraft. The station, bearing the appropriate title of Lan-C-Air Service, Inc., has been open but a few weeks and in that time has built up a large volume of business, according to R. H. Benoit, manager.

The shop carries complete equipment for handling and servicing outboard, marine and airplane engines as well as standard automobile types. To date chief emphasis has been placed on automobile work, although several marine engines are being overhauled in the shop. Opening of New Haven's Municipal Airport in the fall is expected to produce aircraft engine business.

A flying school is being organized by the concern with plans for a ground school at the Columbus Avenue building and flying instruction for the present at the Meriden, Conn., airport. Mr. Benoit was formerly service manager for Dutee W. Flint of New Haven, Inc., Ford dealership now operated under the firm name of New Haven Motors, Incorporated.

Heavy duty tools and other equipment and a staff of mechanics chosen for their versatility in motor work enable the shop to extend its scope over the three automotive divisions. A waterside branch station to cater to boat owners is planned as a future development, according to Mr. Benoit.

Development of aviation in Connecticut has been rapid in recent years and Mr. Benoit expects to build up a large volume in this type of service work. He feels that there will be a distinct need for combination stations of his type in the near future. Another angle is that confidence of the public in the shop's work is increased through knowledge of the fact that airplane and boat engines are handled, as that indicates a superior type of workmanship which would also hold true in the automobile line.

Mr. Benoit has had extensive experience in aviation, having many flying hours to his credit. While he is an enthusiastic booster for flying, his long connection with the automobile business has convinced him that there is little danger of the motor car being seriously affected by air transportation. Being "ahead of the game" is the purpose of the Lan-C-Air station, built to meet the needs of tomorrow.

This Ad Brought Results

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Don't Sell America Short

WHEN any country is in the throes of a business depression, human psychology tends to view matters as being worse even than they are. That same element of human psychology, during boom periods, tends to see conditions as even better than they could possibly be. Last year we heard much talk to the effect that industry and business had reached a point where there were going to be no more valleys, no more recessions, and believing so, we went gayly along having fun in the stock market.

Then came the awakening. In the latter weeks of 1929, we found that the traditional laws of economics still held. We found that even our Federal Reserve system, while it might mitigate the effects of depression, could not prevent a slump from happening. The sudden crash from abnormal prosperity, or seeming prosperity, which had encouraged overproduction and similar evils, produced a state of mind which has made us view conditions as being worse than they actually are. In our anguish of mind haven't a good many of us tended to "sell America short"?

One of the characteristics of this country of ours is an astonishing ability to pick itself up after a crash. The super-pessimism of 1930 has tended to help us perform this very operation. Our pessimism has induced a cutting of production further than we would have done if we had not viewed the situation with such jaundiced eyes. Roger Babson, the authority on economics, has just told us that while consumption has been cut 10 per cent., production has fallen off 20 per cent. and shipment of goods has dropped off by 30 per cent. under the abnormal levels of 1929. Inevitably this situation has been reducing inventories in the hands of manufacturers, wholesalers and retailers. The time has come when stocks have got to be replenished to meet even a reduced demand. The conservative Mr. Babson believes that in many lines of industry a "stampede of orders" will come this fall, simply to meet current demand.

It is scarcely likely that the automotive industry will be assailed with a "stampede of orders" this autumn, because we face the slowest sales period of the year, even in normal times. We can scarcely hope that any tremendous uplift will come before the beginning of 1931. However, it is quite within the bounds of possibility that sales may show a pick-up, even this fall, on a comparative basis. By this we mean as compared with the falling off shown by other months in comparison with similar periods of 1929.

In spite of present recession, the man who "sells America short" is making a grievous error. This country has surprised the world and itself before this by its ability to come back from a business slump. The last business recession that we passed through, comparable to that of 1930, was in 1921, with all its complications of post-war adjustments, overexpansion and other evils in full swing. In 1920 the automotive industry had reached the record total of 2,227,349 vehicle units produced. In 1921 this total was reduced to 1,682,365 units. Many people began selling America short in that recession of 1921, yet in 1922 the automotive industry was back with a new record production of 2,646,229 vehicle units.

It seems probable that after turning out 5,621,709 vehicle units in 1929 the industry will build somewhere about 4,000,000 this year. It is extremely improbable that the year 1931, indeed, it is to be hoped that nothing of the sort will happen, will equal or surpass the record production of 1929. That year was abnormal, it represented heavy overproduction. The last thing any friend of the automotive industry would want would be a repetition of the mistakes of 1929. We can look for an increase in production over 1930, with better selling and real prosperity for the manufacturers and dealers. Don't sell America or its automotive industry short.

Delivered Prices of Pontiac in Key Cities

Prices with spare tire, tube, front and rear bumpers.	New York	Boston	Phil'delphia	Washington	Detroit	Chicago	Atlanta	Dallas	Denver	Portl'd, Ore.
Coupe	*$779.50	$793.50	$770	$783	$740	$763	$805	$817.50	$845	$884
Sport roadster	* 779.50	793.50	770	783	740	763	805	817.50	845	884
Two-door sedan	* 779.50	793.50	770	783	740	763	805	817.50	845	884
Four-door sedan	* 839.50	853.50	830	843	800	823	865	877.50	905	944
Sport coupe	* 839.50	868.50	833	843	800	823	865	877.50	905	944
Custom sedan	* 899.50	928.50	890	903	860	883	925	937.50	965	1004
Phaeton	* 909.50		800		770					

*Equipped with wood wheels, spare tire, tire lock, tire cover and 5 gallons of gasoline. For wire wheels add $120

Bright Employment Outlook Seen by Labor Department

(Continued from Page 1)

of the plants in Pontiac, a general surplus of labor was apparent. Part time continued in automobile factories, automobile body plants, foundries and machine shops. However, branches of the truck industry operated close to normal.

Similar conditions prevailed in Ohio, except that in the tire and rubber industry factories operated full time, but in many instances with reduced forces engaged. Curtailed schedules obtained in many of the industrial establishments throughout the state. Part time was reported in automobile and accessories factories, foundries and iron and steel mills.

Practically all factories in Toledo operated on part-time schedules, being most noticeable in automobile and automobile accessory plants. Operations and employment in the tire and rubber industry in Akron remained below normal, but several tire factories continued on a twenty-four-hour day basis, while several others worked on two ten-hour shifts with curtailed forces engaged.

Industrial operations in Cincinnati were still restricted in the major industries and a surplus of labor was apparent.

Part-time schedules prevailed in many plants in Indiana and unemployment among both skilled and unskilled workers continued in practically all parts of the state. Automobile and accessory factories, foundries and machine shops operated with reduced forces.

In Indianapolis a gradual improvement in industrial activity and employment occurred during the last month. Plants and factory operations in South Bend continued on part-time basis, and in most instances, worked with reduced forces engaged.

Activity in the majority of plants in Wisconsin that were in operation in August continued below normal and there was a surplus of labor in most localities. Part-time operations prevailed in many industries, including automobile and accessories plants.

In Kenosha the majority of factories worked with largely reduced forces, while in Milwaukee industrial activity remained on a restricted basis.

Condensed reports from other principal automotive centers follow:—

NEW YORK

A slight improvement in employment occurred in industrial plants generally. Most of the factories manufacturing automobile and automobile accessories operated with reduced forces and part-time schedules prevailed. However, several automobile factories that were temporarily closed resumed activities and recalled some of their furloughed workers.

New York City—The curtailment in the automobile industry has adversely affected employment in plants manufacturing parts and accessories. In the Yonkers district manufacturing activity showed a moderate improvement in some plants.

Buffalo—The volume of employment in practically all industries reached an unusually low level in August. Several large automobile plants and a number of factories manufacturing accessories operated three days a week.

Rochester—Plants manufacturing automobile accessories operated part time with reduced forces.

Syracuse — Manufacturing activities in several of the major industries showed a slight advance and employment improved somewhat.

NEW JERSEY

The marked slackening in industrial operations which prevailed in July continued throughout August. However, a large automobile assembling plant resumed operations with normal force employed.

Newark—The employment situation showed no change since July.

Trenton—The major industries, including the tire and rubber plants, operated with largely reduced forces.

PENNSYLVANIA

While there was some improvement in activity apparent in several industries in the state, employment generally remained unusually low. The trend of activity in some departments of the iron and steel industry increased slightly, but the level of production and employment continued far below normal. Plants manufacturing airplanes and equipment continued fairly busy.

Philadelphia—Increased activity at Bristol further stimulated the demand for aircraft mechanics.

Pittsburgh—Iron and steel operations averaged slightly better than 50 per cent. of capacity. Most branches of the glass industry continued unusually quiet.

Scranton—A slight upward trend in industrial activity and a gradual increase in employment was apparent toward the close of August.

Allentown—Plants manufacturing automobile trucks operated on curtailed schedules, affecting a large number of workers.

LOUISVILLE DEALERS CUT USED CAR STOCKS

(Continued From Page 1)

months of this year, as against but 285 for the same period of last year. Every month of the year has shown an increase in repossessions other than February.

Mr. Lea's report read:—

STOCK—USED AUTOMOBILES

1929 Month	No. Cars	Average
January	1114	$274.75
February	1131	285.86
March	1166	300.37
April	1166	308.76
May	1081	321.96
June	1073	333.47
July	1101	319.09
August	1131	313.24
September	1077	319.48
October	1105	335.57
November	1252	319.02
December	1476	298.45
1930 Month	**No. Cars**	**Average**
January	1527	$293.98
February	1544	282.08
March	1527	272.16
April	1506	260.57
May	1372	273.88
June	1264	278.89
July	1146	284.73
August	1090	272.61

SALES—USED AUTOMOBILES

1929 Month	No. Cars	Average
January	463	$223.67
February	469	264.24
March	738	271.06
April	888	261.98
May	971	269.84
June	895	258.67
July	844	256.23
August	884	253.38
September	757	244.12
October	637	248.61
November	506	270.11
December	521	285.06

KELLY-SPRINGFIELD BOOKS ARE ORDERED AUDITED

Jersey City, N. J., Sept. 12.—An audit of the Kelly-Springfield Tire Company books to ascertain why it has operated at an admitted loss of $13,784,501 since 1923 has been started by M. H. McTigue, an accountant, on order of Vice-Chancellor John J. Fallon. The latter is hearing the application of James H. Kelly, a stockholder, who seeks a decree of insolvency and appointment of a receiver. Following this survey, which will be filed by the end of the week, Chancellor Fallon yesterday stated he will announce his decision on the application.

1930 Month	No. Cars	Average
January	535	$235.06
February	680	243.82
March	932	253.24
April	1,002	258.30
May	975	253.27
June	805	247.58
July	792	224.86
August	775	216.12

CARS REPOSSESSED

	1928.	1929.	1930.
January	20	27	62
February	25	52	45
March	25	33	55
April	24	37	47
May	14	20	46
June	16	48	51
July	45	36	46
August	29	32	54
Totals	198	285	406
September	35	55	..
October	53	52	..
November	35	74	..
December	48	52	..
Totals	369	518	..

COMING EVENTS

SEPTEMBER

22-26—**Chicago, Ill.** American Society of Mechanical Engineers Iron and Steel Division meeting.
22-26—**Chicago, Ill.** American Welding Society meeting.
22-26—**Niagara Falls, Ont.** American Gear Manufacturers Association semi-annual meeting.
22-26—**Chicago, Ill.** Society for Steel Treating meeting.
22-26—**Chicago, Ill.** American Society for Steel Treating meeting at Stevens Hotel.
29-Oct. 4—**Pittsburgh, Pa.** National Safety Council Annual Safety Congress.

OCTOBER

2-12—**Paris, France.** Automobile Salon.
6- 7—**Reading, Pa.** Pennsylvania Automotive Association Convention.
6- 8—**Tulsa, Okla.** American Society of Mechanical Engineers Petroleum meeting.
6-11—**Washington, D. C.** Sixth International Road Congress.
6-11—**Washington, D. C.** American Roadbuilders' Association Convention.
7- 8—**Detroit, Mich.** Society of Automotive Engineers production meeting at Book-Cadillac Hotel.
13-15—**French Lick Springs, Ind.** American Society of Mechanical Engineers general meeting.
14-15—**Syracuse, N. Y.** New York State Dealers' Association Convention.
16-25—**London, England.** Olympia Motor Show.
22-24—**Pittsburgh, Pa.** Society of Automotive Engineers transportation meeting.

NOVEMBER

4- 7—**Chicago, Ill.** National Tire Dealers' Association Convention.
6-16—**Berlin, Germany.** International Automobile Show.
8-15—**Chicago, Ill.** Automobile Salon at Drake Hotel.
10-14—**Cleveland, O.** Motor and Equipment Association Show.
13-23—**Paris, France.** Commercial Vehicle Salon.
17-21—**Cleveland, O.** National Standard Parts Association Show.

WEEKLY BUSINESS INDICATORS

REPRODUCED BY ARRANGEMENT WITH THE SURVEY OF CURRENT BUSINESS

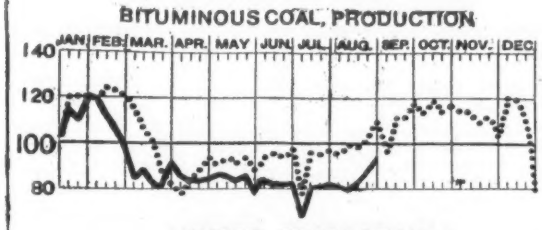
U. S. DEPARTMENT OF COMMERCE

DATA PLOTTED, WHERE AVAILABLE FOR WEEK ENDING SEPT. 6 1930

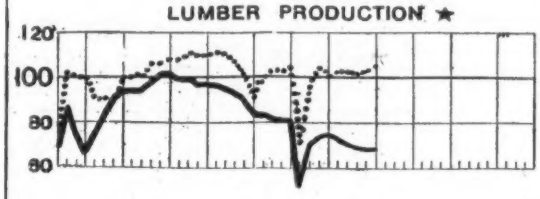
WEEKLY AVERAGE, 1923-1925, INCLUSIVE = 100

~LEGEND~
..... 1929
——— 1930

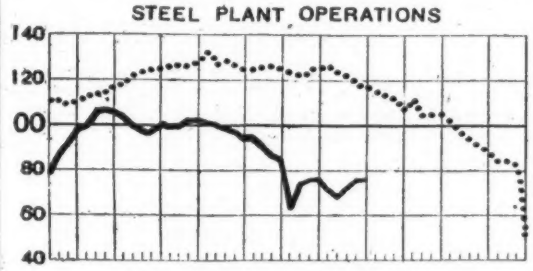
BITUMINOUS COAL, PRODUCTION



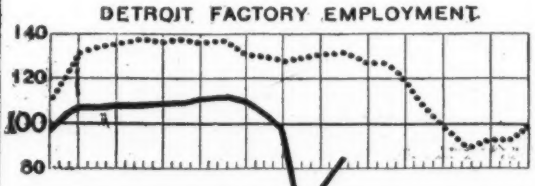
LUMBER PRODUCTION ★



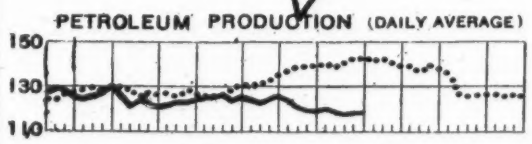
STEEL PLANT OPERATIONS



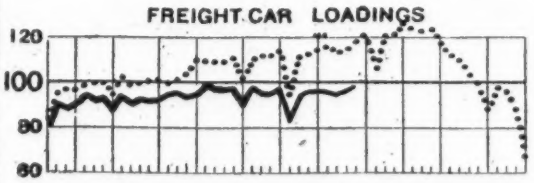
DETROIT FACTORY EMPLOYMENT



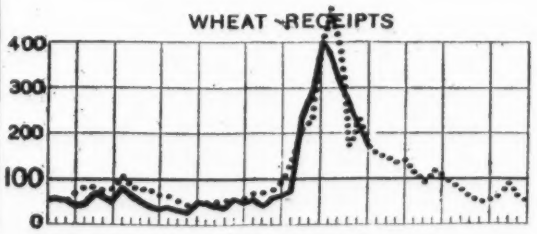
PETROLEUM PRODUCTION (DAILY AVERAGE)



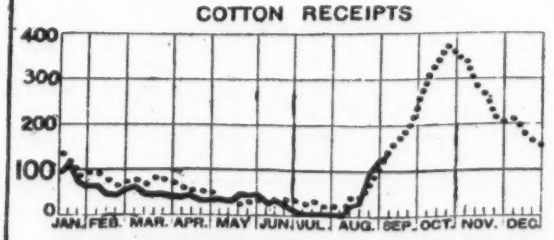
FREIGHT CAR LOADINGS



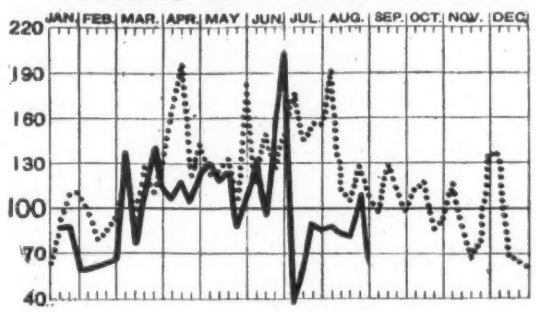
WHEAT RECEIPTS



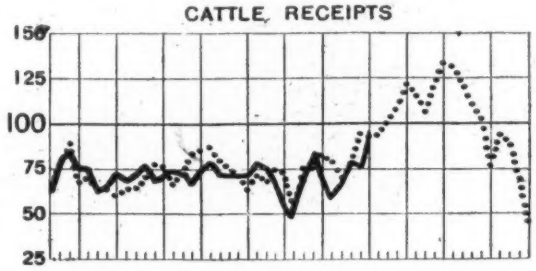
COTTON RECEIPTS



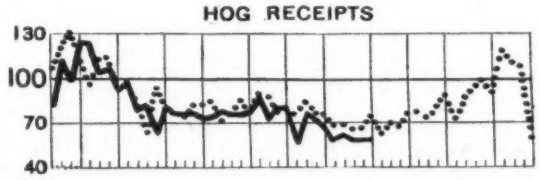
BUILDING CONTRACTS (DAILY AVERAGE)



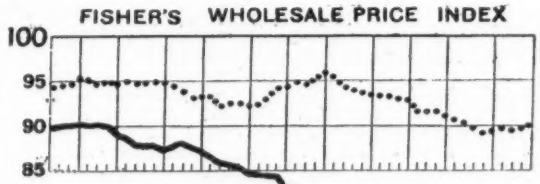
CATTLE, RECEIPTS



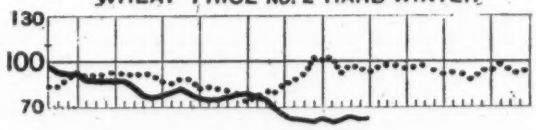
HOG RECEIPTS



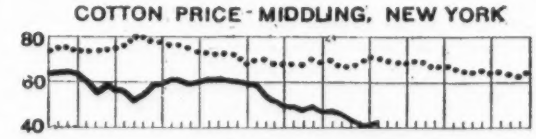
FISHER'S WHOLESALE PRICE INDEX



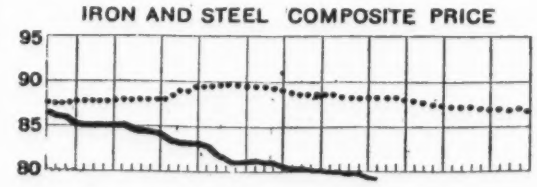
WHEAT PRICE NO. 2 HARD WINTER



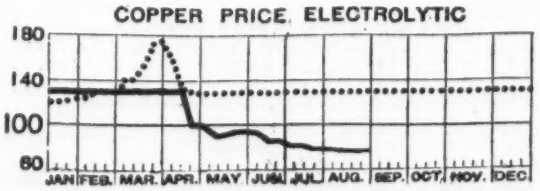
COTTON PRICE-MIDDLING, NEW YORK



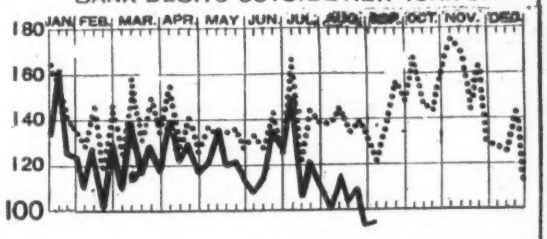
IRON AND STEEL COMPOSITE PRICE



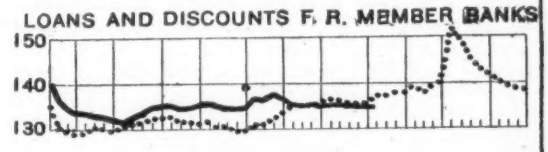
COPPER PRICE, ELECTROLYTIC



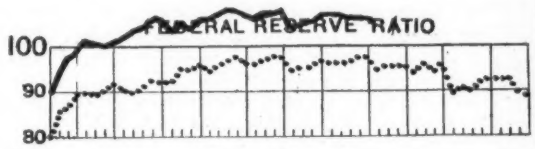
BANK DEBITS OUTSIDE NEW YORK CITY



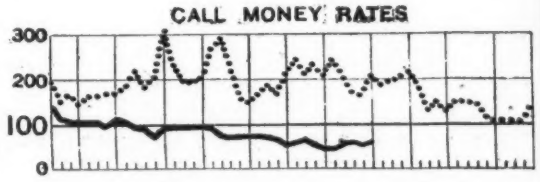
LOANS AND DISCOUNTS F. R. MEMBER BANKS



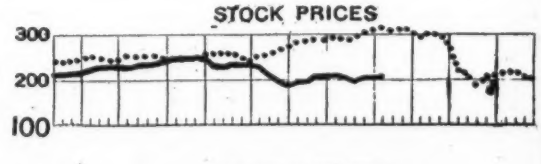
FEDERAL RESERVE RATIO



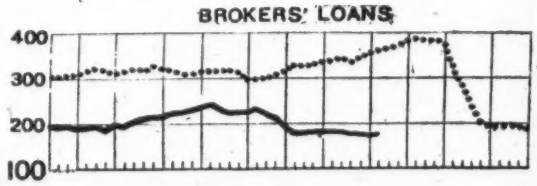
CALL MONEY RATES



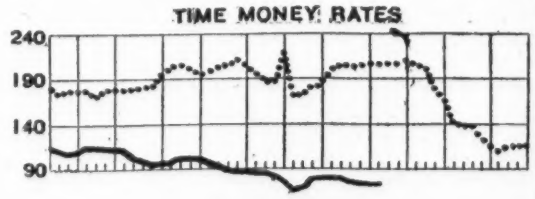
STOCK PRICES



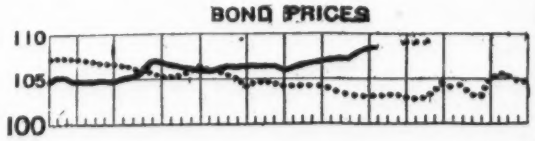
BROKERS' LOANS



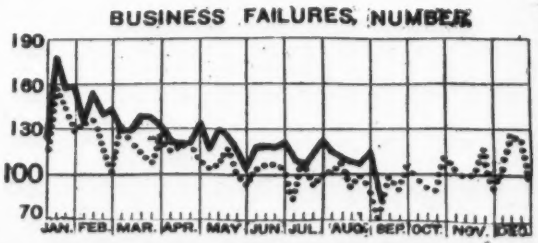
TIME MONEY RATES



BOND PRICES



BUSINESS FAILURES, NUMBER



★ RELATION TO WEEKLY AVERAGES 1927-1929 PER WEEK SHOWN.

Service Notes

Dayton, O., Sept. 12 (UTPS).—The Genuine Parts Company, because of the rapid increase of its business since its establishment several years ago, has been compelled to secure larger quarters at Ludlow and Franklin Streets. The new location is more centrally located and is sufficiently large to install all of the company's equipment. The company handles replacement parts and also does a general repair business. R. C. Walters is president, W. C. Schultz vice-president and treasurer and E. T. Schutz secretary.

New Britain, Conn., Sept. 12.—The New Britain Welding Company will shortly abandon its plant in Glen Street and transfer operations to a building on Booth Street, in the industrial district. Zoning difficulties caused the decision to move.

Spokane, Wash., Sept. 12.—The Universal Equipment Company has started manufacture of a patent pneumatic jack for greasing automobiles.

Rochester, N. Y., Sept. 12.—The plant and equipment of the Goodmore Tire Company, Inc., Firestone distributor in central western New York, at 56-58 North Union St., has been remodeled and enlarged to provide all modern service facilities. The concern was organized in 1915 and is headed by John J. Goodland, while Sherman H. Pooley is secretary-treasurer. Marvin Gray, branch manager of the Firestone Tire and Rubber Company, maintains headquarters in the plant and is in charge of tire sales and service.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

MERCHANDISING ACCESSORIES EQUIPMENT

WHOLESALE

DISTRIBUTION SHOP EQUIPMENT REPLACEMENTS

LINCOLN, NEB., JOBBER REPORTS 25% INCREASE IN FIRST WEEK OF SEPTEMBER; SEES BANNER YEAR

LINCOLN, Neb., Sept. 12.—H. E. Sidles Company, one of the largest jobbers of automotive accessories, replacement parts and shop equipment in the Middle West, reports a 25 per cent. increase in business for the first week in September over the same week last month, both at the main store in Loncoln and at the four branch houses in Iowa and Nebraska. Indications point to a banner last quarter, Mr. Sidles says.

The company was formerly the automotive supply and wholesale division of the Nebraska Buick Auto Company, which sold out to the Buick Motor Company last summer, Mr. Sidles retaining the automotive supply division. The company recently moved into a new building at Lincoln, giving it one of the most modern, efficiently arranged and completely stocked jobbing establishments in the country. The building is a half-block long by 100 feet wide and the wholesale firm occupies all three floors, the first floor being a display room, the second a stock room and the third housing the offices.

Lines which have been moving exceptionally well in September include Tropic-Aire heaters, laquer products produced by the Lincoln Paint and Color Company, Dreadnaught tire chains, Perfection Gear Company's fly wheel ring gears, timing gears and timing chains, and the McQuay-Norris Manufacturing Company's pistons, pins, rings, valves, bearings, bolts and bushings.

The H. E. Sidles Company recently took over the jobbing of R. C. A. equipment in Nebraska, Iowa and southern South Dakota, and more than 1,200 dealers from the three states attended meetings held last week Omaha, Sioux City, Ia., and Des Moines, Ia. The Omaha meeting was the largest, with 550 dealers in attendance. More than 2,000 orders were received from dealers in the territory before they had even seen the sets, according to C. L. Carper, in charge of the company's wholesale distribution of R. C. A. radiolas.

Wholesale Brevities

Omaha, Neb., Sept. 12.—W. M. Dutton & Sons of Hastings, Neb., which has been in existence for forty-five years, manufacturing and jobbing automotive supplies and equipment and general hardware, has become the distributor of Atwater Kent radios in eastern Nebraska and southwestern Iowa, and has established a branch office here. It is located in the M. E. Smith Building, and M. J. Murphy, connected with the firm for eleven years and of late manager of the automotive supplies and radio department, is manager.

Newark, N. J., Sept. 12.—Nick Iacovanti, president of the Electric Battery Company, northern New Jersey distributor for Exide batteries, has returned from Bradley Beach, where he spent a month's vacation. "Battery sales will be good this fall," he predicts.

Seattle, Wash., Sept. 11.—Announcement has just been made of appointment of the P. J. Cronin Company, Seattle, as distributors for Graco products, including a specialized lubrication service.

Birmingham, Ala., Sept. 12.—Auto Parts and Glass Company, a new concern, has opened for business at 1500 Second Avenue, north.

Irvington, N. J., Sept. 12.—The Paragon Service, Inc., of which G. A. Knuttschmitt is president, has become Firestone tire distributor in its territory. The concern is located at Springfield and Harrison Avenues.

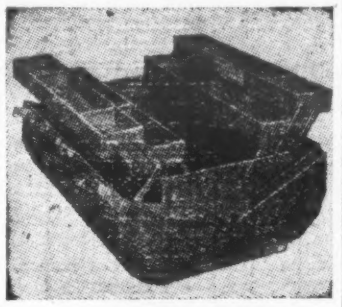
Seattle, Wash., Sept. 12.—Announcement is made of the appointment of Grant Auto Electric Company, Seattle, as official sales and service station for S. & M. Lamp Company of Los Angeles, Jim Sherriffs, manager of the latter, having just been here to close up the arrangements with George D. Grant of the Seattle concern. Complete stocks of parts will be carried.

HEADLIGHT TEST BEING CONDUCTED IN CHICAGO

Chicago, Sept. 12.—Under direction of Chief Walter L. Moody, the state highway police have launched a special drive against motorists who appear on the roads at night with only one headlight burning. Although the state law provides a $25 fine for violation, Chief Moody's men have been instructed to handle the situation in a lenient manner. Their method is to stop "one-eyed" cars and direct the drivers to the nearest garage for repairs.

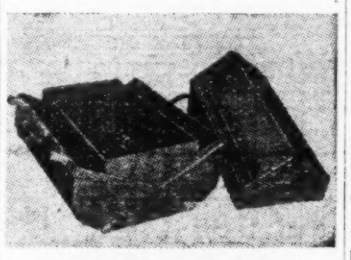
In a statement issued by Chief Moody he says that a driver may go to a different garage from the one specified by an officer if he so desires, in which event the patrolman gives him a ticket and instructs the motorist to appear at a later date for an inspection of his lights.

DUPLEX OFFERS TWO NEW TOOL CASES



MASTER CASE

The Duplex Wrench Corporation of Jamestown, N. Y., announces two new mechanic's cases. The Duplex "Master Case" is 19 inches long, 10 inches wide and 12 inches high. It



DUO-ALL TOOL CASE

is equipped with lock and leather handles. List price, $8.50. The Duplex Duo-All Tool Case has the same dimensions and is equipped with regular tool tray. It is listed at $7.

NEW LAWCO STEEL MECHANICS' CREEPER

The F. H. Lawson Company of Cincinnati announces a new Lawco mechanics' creeper made of sixteen-gauge steel, strongly reinforced and welded together. The finish is olive green. It has a padded imitation leather head rest and four Universal casters. The total height to the top of the head rest is four inches, enabling it to be used even under the lowest hung cars.

Specifications: Number, 28; size, 39⅝ inches long, 18⅝ inches wide; packed, one to a crate; shipping weight, 22 pounds each; list price, $4.65 each.

Editor's Column

SPECIAL efforts are being made by the government, through the Domestic Commerce Division of the Department of Commerce, to help the so-called "little fellows" in business.

The department has inaugurated a "small business section," the prime purpose of which is to co-operate with small business men in helping them to help themselves.

The greater number of merchants who operate on a relatively small scale do not have the facilities to work out their own problems, and it is for them that the special section was created.

Although there are thousands of merchants who contact with the government only as an agency of taxation and law enforcement, there is a rapidly increasing number who are finding that many of its functions are designed to help them in their every-day business problems.

Created particularly to make the government services more easily available and more useful to the business concerns, the Domestic Commerce Division furnishes information on many phases of business of a character which it is impracticable for business men of limited means to work out for themselves.

A retailer may want to know the frequency of turnover of the various groups of items in an average stock. An association might want to ascertain the mortality among certain small concerns. Through its special sources, the section devoted to the answering of special inquiries is able to give inquirers complete plans for the organization, set-up, management and efficient operation of a retail store.

In explaining the functions and facilities of the Domestic Commerce Division, H. C. Dunn, chief of the division, points out that in some localities, at least, nearly one-third of the retailers are doing less than $5,000 worth of business a year. Information collected indicates that perhaps 79 per cent. of all the retailers are operating what might be termed small business establishments.

Mr. Dunn points out that the prime purpose of this work among small business men is to co-operate in helping them to help themselves. Much information has already been collected by the department, which may be had upon request. Bulletins which have proved particularly popular are "Retail Profits Through Stock Control," showing methods by which a merchant discarded those items not in great demand with increased profit of 50 per cent. and decreased investment; "Analyzing Retail Selling Time," "Credit Extension and Business Failures," "Preliminary Report, National Retail Credit Survey" and "Practical Aids to the Independent Merchant," all of which are available, free, upon request.

In the opinion of Mr. Dunn, "it is the so-called little fellow in business who can often profit to greater advantage from governmental assistance of the type outlined, and, as a result, special efforts are made to provide detailed answers to all requests of this kind." He said that, as the department's work develops, a much greater range of information will be available to the business man to assist him in avoiding the mistakes and pitfalls which have wrecked so many small businesses in the past. An examination of the records of the morgue of business failure, according to Mr. Dunn, shows that mismanagement is the cause of the greater percentage of commercial deaths.

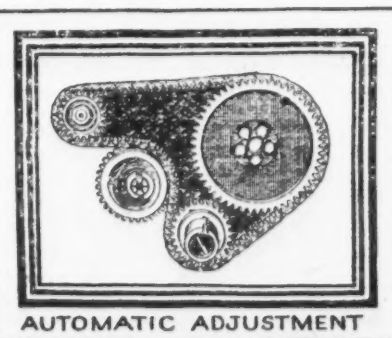
CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

MULLINS for STAMPINGS
Quality—Service—Price
MULLINS MANUFACTURING CORP.
In the Cleveland and Pittsburgh District, Main Office and Works, Salem, Ohio.
BRANCH OFFICES:
332 S. Michigan Ave., Chicago, Ill.
7-252 General Motors Bldg., Detroit, Michigan

CUMULATIVE NEW PASSENGER CAR

Returns for today: Delaware, North

States	Auburn	Austin	Black Hawk	Buick	Cadillac	Chevrolet	Chrysler	Cord	DeSoto	Dodge	Durant	Essex	Ford	Franklin	Gardner	Graham	Hudson	Hupmobile	Jordan	La Salle	Lincoln
Delaware	2	4		79	5	136	19		3	2	10	12	238	1		2	5	3		3	
Illinois	34	47		979	58	2503	347	26	218	258	45	162	4433	39	12	114	89	125		53	35
N. Dakota		1		14		153	8		2	7	7	7	172			5	2				
Utah		2		30	1	99	8	1	5	10	20	8	156	2		8	5	3		2	
W. Va.	5	6		80	4	533	59		29	66	13	40	787	3		35	15	10		3	1
Total	41	60		1182	68	3424	441	27	257	343	95	229	5786	45	12	164	116	141		61	36
Dela., '29	8			105	5	134	4		3	7	22	23	306	3		2	17	6		3	1
Illinois, '29	170		14	1885	94	4091	541		382	570	178	876	8071	46	16	444	381	252	10	142	57
N. D., '29	2		1	46		264	20		10	17	18	27	586			11	11	2		2	2
Utah, '29	6			94	2	271	25		19	24	61	48	536	3		32	15	13		5	1
W. Va., '29	7		5	192	6	889	85		56	121	33	140	1393	4		91	45	30	1	11	4
Total, '29	193		20	2322	107	5649	675		470	739	312	1114	10892	56	16	580	469	303	11	163	65



Its enduring effici

WEAR takes place in machinery of every character—wherever there are moving parts. Link-Belt admits wear in Automotive Timing Chains, but in Link-Belt Silent Chains the wear is minimized and controlled.

Austin Car Owners Laud Performance of New Unit

(Continued From Page 1)

and gas consumption twenty-eight and a half gallons. Fifty miles per gallon again.

"One of the most impressive records of all is that set by Morris Barsky, who drove a new bantam Austin from Pittsburgh to Los Angeles, 3,141 miles, in eight days and six hours, at an expense of seven-tenths of a cent per mile. He used seventy gallons of gasoline on the trip and averaged 44.9 miles to the gallon. Including the cost of six changes of oil and of greasing and tightening the car, which was new when he left Pittsburgh, his total expense for transportation was exactly $23.84.

"E. H. Bacon of Jacksonville telegraphs that less than forty-eight hours after he left here in a bantam Austin, he was back home in Jacksonville—and he stopped overnight en route and spent some time sightseeing in Washington. His gasoline expense from Butler to Jacksonville was $5.90; his mileage averaged over forty-five miles to the gallon, and his elapsed time from Washington to Jacksonville was only twenty-six hours.

"Bantam Austins are now being turned out at the rate of 200 a day. Orders now exceed 200,000, and the normal capacity of our plant is 60,000 bantam Austins a year. We are stepping up production as fast as possible, and adding new men to our force as quickly as we can train them to do the quality work required."

Denver on one and a half gallons of gasoline, again an average of more than fifty miles to the gallon.

"Distance runs include a trip from Jacksonville, Fla., to Asheville, N. C., a distance of 1,025 miles, on 20.46 gallons of gas. The total elapsed time, checked by Postal Telegraph, was 32 hours and 10 minutes. No mechanical adjustments were required, though road conditions included mud, sand-clay and gravel. F. R. Colthorp, Boise, Idaho, insurance man, reports that he drove his bantam Austin from Boise to Santa Cruz, Cal., in three days. The distance was 1,409 miles

S. P. A. OFFERS DE LUXE CABS, STANDARD BODIES FOR STUDEBAKER TRUCK

(Continued from Page 1)

frames are of hardwood construction, securely glued, screwed and bolted together and thoroughly braced. All panels are of pressed steel. The front corner post is a steel box section to which the separate all-steel cowl fastens securely. The back panel is fitted with a solid window. The doors are 26½ inches wide, with twenty-three-inch windows which drop flush with sills. The rear window is 25⅝ inches wide. Narrow steel pillars give full vision for the driver. Seats are comfortably upholstered and there is more than the usual amount of leg room.

The frames of all bodies, except the all-steel express and dump types, are also made of selected hardwood, thoroughly braced and supported at all points subjected to strain by steel or malleable iron braces. The all-steel express body has sides and bottom formed from sheet steel, with electric welded corners and reinforcements. A similar type of construction prevails in the dump bodies.

The standard color for cab, cowl, engine hood and bodies is Chippendale Brown. Fenders are lacquered in black. The black wheels have Cardinal Red locking rims. Other colors are available at extra cost.

The line of standard bodies includes a panel delivery, screen delivery, canopy top express, open express, heavy duty express, platform stake, stock rack, stock, Chicago stake, contractor's body, combination farm and stake, furniture, platform and steel dump bodies.

In addition to regular bodies, standard bodies by standard body makers are adaptable to Studebaker truck chassis. With such a wide range of choice every trucking need is satisfied.

DURANT OFFERS LARGE FOUR-CYLINDER CAR

(Continued From Page 1)

in three body styles on 112 inch wheel base. The models will be priced at: Four door sedan, $695; coupe, $695; coach. $675.

This gives Durant two lines of sixes and two lines of fours, as the Mathis small car will be a four.

Harry J. Shorter, general sales manager, says: "The new car meets insistent demand for quality four, and since it is said to be the largest four on the market it gives Durant an edge on the select market of users preferring economy of four, retaining comfort, appearance, performance of multiple cylinder cars."

KELLY-SPRINGFIELD HEARING RESUMED

New York, Sept. 12.—The hearing before Vice-Chancellor Fallon in Jersey City on the application by James A. Kelly, owner of 100 shares of Kelly-Springfield common stock, for a receivership for the company, was resumed today.

Wednesday's hearing was largely taken up with submission of an affidavit by Samuel Woolner, Jr., president of the company, setting forth the strong financial condition of the company. Mr. Woolner stated that, on the basis of known results of July operations and an estimate of August business, he estimated net profit for the two months at approximately $270,000.

Counsel for Mr. Kelly stressed the point that the company had lost $13,000,000 since 1923, and expressed his belief that the outlook for the company was poor. He stated that the company had been able to remain solvent because of the successful sale of 700,000 shares of common stock at $21 a share in 1928.

Counsel for the company expressed the opinion that the application for receivership had not been made in good faith. To support this belief, there was introduced an affidavit from the Chase National Bank, the company's transfer agent, stating that Mr. Kelly was not a stockholder of record either on the day when he certified his affidavit nor on the day following.

FISK RUBBER REPORTS ITS FINANCIAL CONDITION

New York, Sept. 12.—The statement of Fisk Rubber Company and subsidiaries as of June 30, 1930, shows total assets of $57,259,525, comparing with $63,414,135 on June 30, 1929, and profit and loss deficit of $8,717,615 against surplus of $1,193,952. Current assets on June 30, this year, amounted to $21,617,586 and current liabilities $1,952,861, comparing with $34,861,495 and $5,455,055, respectively, on June 30 of previous year.

OTHER FINANCIAL NEWS

ROSS GEAR AND TOOL

Net profit of Ross Gear and Tool Company for the eight months ended August 31, 1930, was approximately $277,000 after charges and taxes.

For the six months ended June 30, 1930, net profit was $256,948, equal to $1.71 a share on 150,000 no-par shares of capital stock.

Edward A. Ross, president, estimates net profit for the full year of 1930 will be about $415,000, which would equal $2.76 a share and would compare with net profit for 1929, of $565,581, or $3.77 a share.

NOBLITT-SPARKS

Noblitt-Sparks Industries, Inc., reports for the eight months ended August 31, 1930, net profit of $293,178 after charges and taxes, equal to $3.74 a share on 78,426 shares of no-par stock. This compares with $336,213, or $4.29 a share in the corresponding period of 1929, based on same number of shares.

The August net profit was $84,510 after charges and taxes, against $84,129 in August a year ago.

MIDLAND STEEL PRODUCTS

The Midland Steel Products Company has declared the regular quarterly dividends of 75 cents on the common, $2 on the 8 per cent. preferred and 50 cents on the $2 preferred,, all payable October 1 to stock of record September 22. E. J. Kulas, president, states the company has cash and the equivalent in excess of $7,000,000.

STANDARD OIL UNITS TO ADD POSTAL TELEGRAPH SERVICE AT STATIONS

Newark, N. J., Sept. 12.—The gasoline service station now has added the telegraph to its long list of facilities.

The Standard Oil Company of New Jersey has arranged with the Postal Telegraph and Cable Company to utilize the network of the Jersey Standard Company's filling stations as depots for dispatch and receipt of telegrams. Contracts have also been signed with Standard of Louisiana and Standard of Pennsylvania, Colonial Beacon Company, Standard of Indiana, Standard of California, Standard of Ohio, Standard of Nebraska and the Utah Oil Refining Company.

The Western Union Telegraph Company says negotiations for similar arrangements with several other large oil companies have reached a final stage. Shell Eastern Petroleum, Cities Service, Sinclair Consolidated Oil, Tide Water Oil and possibly Richfield and Standard of New York are listed.

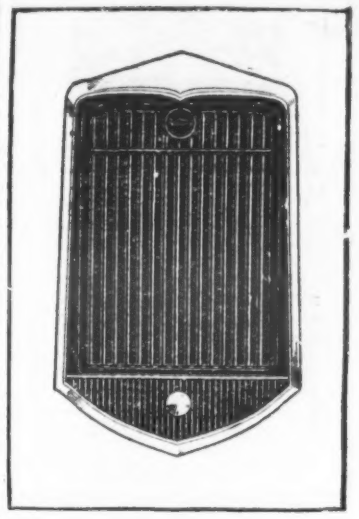
Messages handed in at filling stations would be telephoned to the nearest telegraph station. The sender pays at the oil station and the telegraph company charges it to the oil company.

Incoming messages are received by telephone. Service station workers are to receive a small commission.

REGISTRATION STATISTICS, AUGUST, 1930

Dakota, Utah and West Virginia

States	Marmon	Nash	Oakland	Oldsmobile	Packard	Peerless	Pierce-Arrow	Plymouth	Pontiac	Reo	Studebaker	Stutz	Viking	Whippet	Willys	Willys-Knight	Windsor	Miscellaneous	Totals
Delaware	2	8	9	1	14			19	24		11		2	1	4	1			620
Illinois	37	257	104	214	245	12	29	383	323	28	555	17	12	62	151	85	10	12	12,113
N. Dakota	3	4	3	9	1			21	10		7			6	6	4			452
Utah	2	17	2	6	7			6	8	3	10	2	3	3	1				430
W. Va.	13	34	24	27	11	2	2	114	62	7	39		4	16	28	16		1	2,089
Total	57	320	142	257	278	14	31	543	427	38	622	19	21	88	190	106	10	13	15,704
Dela., '29	2	30	14	14	26	1	1	19	32		20		1	19		4			832
Illinois, '29	172	812	218	717	461	89	50	570	1165	90	788	17	55	771		186	7	318	24,706
N. D., '29	13	24	10	27	4		1	37	35	1	16	1	2	86		17			1,293
Utah, '29	6	29	3	42	11			17	30	2	36	2	2	24		5			1,364
W. Va., '29	40	83	27	96	40	1	3	102	145	22	83	2	6	158		38			3,959
Total, '29	233	978	272	896	542	91	55	745	1407	115	943	22	66	1058		250	7	318	32,154



Prepare Now

for an unusual demand for

The new improved Vertical Automatic

PINES WINTERFRONT

with instantaneous closing device

THE Pines Winterfront has been improved and the prices reduced to $15 for the small size and $20 for the large size. These low prices will insure a heavy demand for the new vertical type Winterfront this season. Now no car owner can afford to be without the automatic radiator protection it provides. Owners of all cars not equipped at the factory will be *hot* prospects. All any dealer has to do to collect the profits is to display one of the new Winterfronts and show it to car owners. To insure prompt deliveries get in touch with the nearest Pines Distributor at once. His name will be sent on request.

Small Size now only $15

Large Size now only $20

PINES WINTERFRONT COMPANY

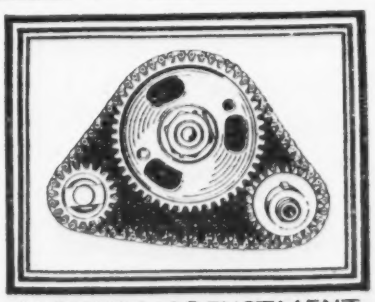
1151 N. Cicero Ave., Chicago

iciency is assured

To study Silent Chain construction is to learn the secret of the success of Link-Belt Automotive Silent Chain—the pin-bushed-joint construction. At the vital point there is inbuilt durability.

3094-A

LINK-BELT COMPANY · INDIANAPOLIS DETROIT



MANUAL ADJUSTMENT

Production--Engineering--Factory-

Time Cycle Contactors Regulate Operations

Contactors to enable carrying out a program of operations on a time cycle basis are daily coming into greater use for such work as the automatic operation of furnace doors, automatically advancing the load in a continuous type furnace, automatically timing material being heated or electroplated, automatic lubrication, automatic operation of hydraulic presses for tempering saws for plastic molding of bakelite, hard rubber, etc.

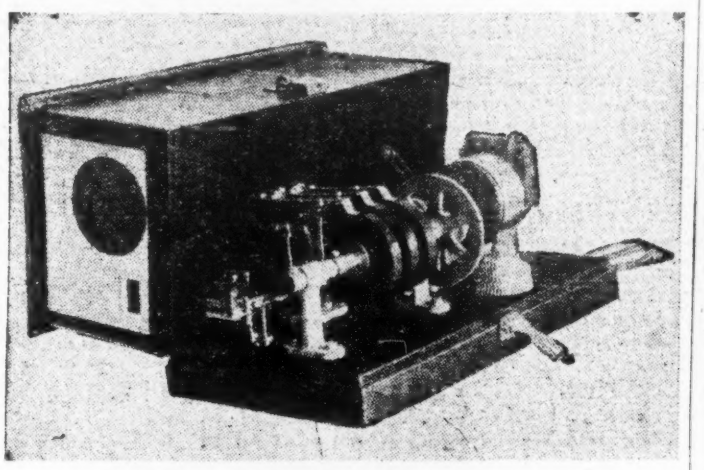


Fig. 1

A few of the time cycle contactors developed by the Automatic Temperature Control Company, Philadelphia, Pa., to meet this varied demand are briefly described below and may be broadly classified under under general groups, viz.:

1. Cycle repeating contactors, designed to periodically repeat the cycle so long as the line switch is closed.

2. Cycle stock contactors, designed to start from a push-button switch, run the time cycle set and stop until the starting switch is again actuated.

Figure 1 shows a cycle stop type contactor designed to handle three

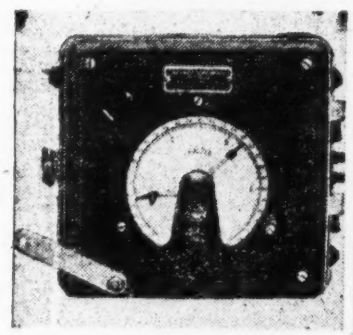


Fig. 2

contacts per cycle in desired sequence. Accurate timing and the necessary power for operation is obtained from a small synchronous motor, geared to desired time of cycle. Change gears permit altering time of cycle. One cam is pinned to the cam shaft, but the others are held in spring tension and are adjustable in relation to each other within the time of the cycle. Provision is made for shortening or lengthening the time of contact per cycle, and where necessary, contacts can be provided of a type to quickly make and also quickly break the circuit. Progress of the cycle is shown by an indicator arm which travels around a graduated dial marked on a glass in one end of the instrument case. The number of operations in a given time may be readily noted as a totaling counter is tripped each cycle. Units of this type have been built with eleven contact discs and with a cycle of ninety-six hours, while others have been built with a cycle of only a few seconds.

Figure 2 shows a cycle stop type contactor, which does not require change gears to alter the time of cycle, this change being easily and curate timing is obtained from a small double field synchronous motor, which moves the elapsed time contact arm clockwise or counterclockwise, depending on which of its field coils are energized. This unit is built in both the cycle stop and the cycle repeating types. The cycle-stop type has a reversing switch mounted on the instrument case, but where desired, this switch can be located at a distant point.

The extension lever at lower left-hand corner is designed for operation of the reversing switch. This lever is normally held in a raised position by means of a spring, thus throwing the motor line switch to "off" position. Placing the work in position for treatment mechanically pulls down the lever arm and throws the motor line switch to "on" position, thus energizing one winding of the motor, so that elapsed time contact arm starting from zero, travels clockwise for the time cycle set, upon completion of which, the contact is made to operate a signal, or if desired, a motor-operated controller. When a motor controller is used it can be arranged to automatically remove the work at the end of the cycle, and in so doing the lever arm is pulled up by the spring, thus throwing the motor line switch to "off" position. When the next load of work is placed in position, the lever arm is again pulled down, throwing the line switch to "on" position, but this time energizing the other winding of the motor, so that the elapsed time arm travels counter clockwise for the same time period, making contact at the zero position of the scale and repeating the signal or the automatic removal of the work.

The table below gives standard full scale dial range for this type unit and the value per scale division:

Full Scale Range of Dial	Value Per Scale Division
1 Minute.....	1 Second
2 Minutes.....	1 Second
5 Minutes.....	1 Second
10 Minutes.....	2 Seconds
15 Minutes.....	3 Seconds
20 Minutes.....	4 Seconds
30 Minutes.....	6 Seconds
40 Minutes.....	8 Seconds
60 Minutes.....	12 Seconds
120 Minutes.....	30 Seconds

It is possible to set the high contact arm for any desired elapsed time within full scale range of the dial, and this setting can be made to a scale division or closer. The elapsed time arm travels with equal accuracy either clockwise or counter-clockwise. These units, it is stated, will be found sturdy in construction, dependable in action, and accurate as to timing.

Fig. 3 shows a timing contactor of the cycle stop type which was designed for a tunnel kiln manufacturer to gradually advance loaded cars of work through a kiln by governing the speed of a hydraulic ram under 3,000 pound pressure. Due to the possibility of "wire drawing" the valve parts at this pressure it was desirable to throttle the water to the ram in order to take 3½ hours for full ram stroke of 91 inches, hence it was decided to operate a two position motor valve in a by-pass line around the ram, this valve to be opened and closed by means of contacts carried by the timing unit.

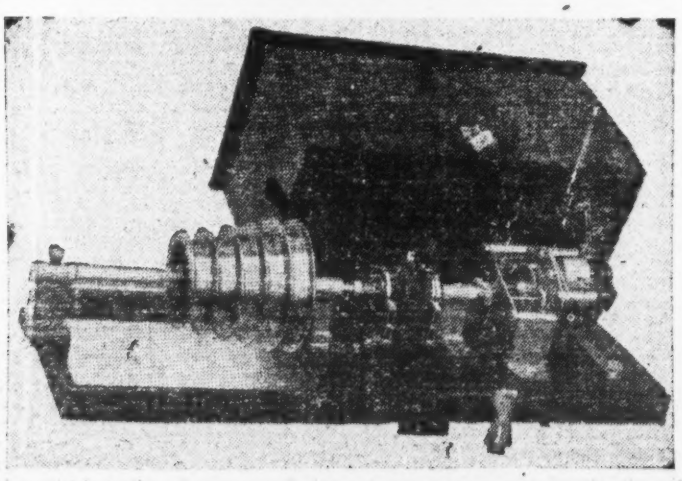
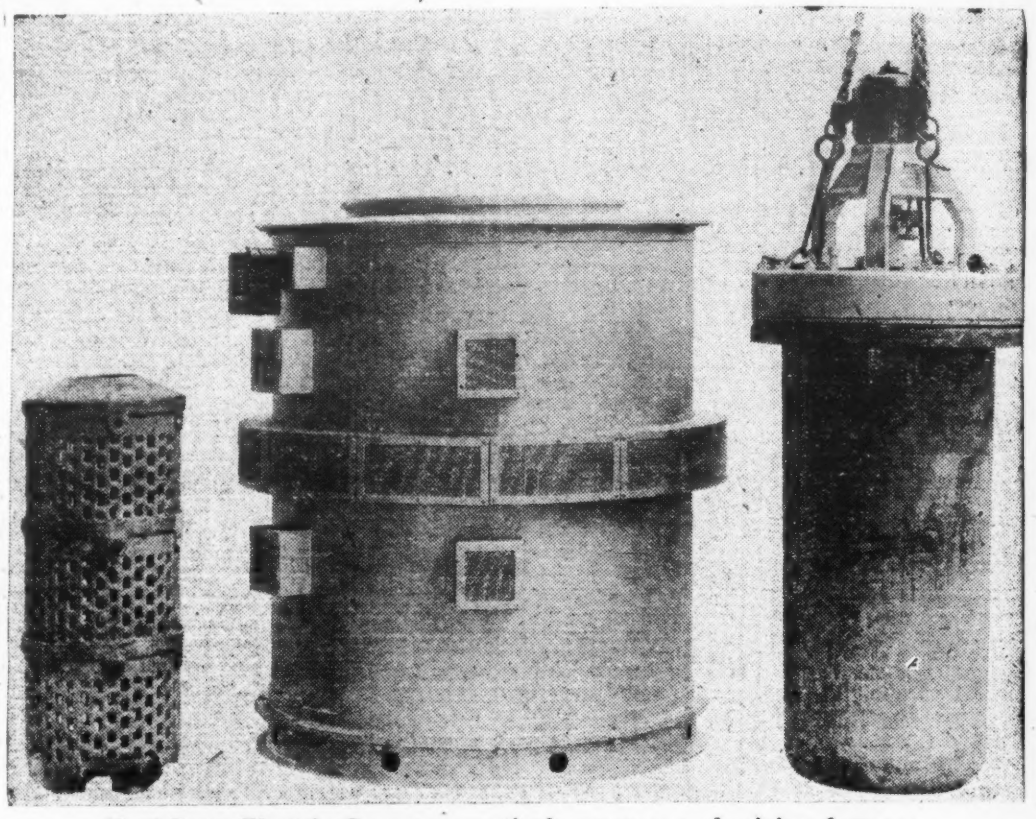


Fig. 3

Referring to Fig. 3, the shaft at right end is driven by a small synchronous motor geared for desired r. p. m. and carries opening and closing contacts. The shaft at left end carries the common contact and is rotated at speed the ram is traveling by means of a cord attached to the ram and passed over a cone of the step cone pulley, the pulley cone being selected according to the speed desired. In this instance the different cones reduced the ram speed in fifteen minutes steps from a maximum of 3½ hours.

Arrangements were made that the water supply to the ram could be adjusted so that when valve in by-pass was closed the ram traveled slightly faster than desired and when open, slightly slower than desired. With the ram traveling faster than desired, the common contact on the step cone pulley shaft overtook contact on the motor driven shaft, and actuated the controller to open valve in the by-pass line tending to slow down the ram speed. This permitted the motor driven shaft to operate faster than the step cone pulley shaft, so that the opposite contact was shortly made, thus closing valve in the by-pass line and in this way keeping the ram advancing at the desired speed.

On small units satisfactory operation was obtained and less equipment required by directly operating the motor-driven pump from these contacts, thus eliminating the motor control valve in by-pass line.



Hevi Duty Electric Company vertical pressure carburizing furnace.

Hevi Duty Electric Co. Makes New Furnace

The Hevi Duty Electric Company of Milwaukee, Wis., has just introduced the electric vertical pressure carburizing furnace to the steel treating industry.

The furnace is a standard crucible type, having elements mounted in the side walls, which radiate and reflect the heat directly to the retort. A three-section alloy basket in which the charge is placed fits into a nickel-chromium retort which is bolted and sealed air tight to the cover. The cover has a motor-driven fan for circulating the carburizing gases evenly throughout the entire charge. Packing glands and motor mounting on top of the cover facilitates maintenance and adjustment and permits the furnace to be dropped in a pit.

Carburizing gas is premixed in an automatic device with a pre-determined amount of air and compressed to ten pounds pressure. It is then delivered through the furnace cover to charge, where the mixture is cracked into hydrocarbons and the carbon absorbed actively. The amount of carbon in the case is controlled accurately by the air ratio, varying uniformly from the core to outside of the case.

The carbon penetration takes place rapidly. On continuous operation approximately four heats can be run in twenty-four hours on ordinary normalized carburizing steels with a penetration of approximately 1-16 inch at a retort temperature of 1,675 degrees F. In an overnight shut-down, the temperature drops to about 1,000 degrees F. and can be brought back to operating temperature in approximately one hour.

NEW BRITISH CAR LOOKS LIKE AIRSHIP

New York, Sept. 12.—Word has been received here of the development in England of a new automobile shaped like an airship and capable of greater speed as a sedan seating seven than as a chassis. It was designed by Sir Dennis Burney, who built the giant airship R-100. The car has its engine in the rear and has many wind resistance features.

The front of the car is scarcely higher than the wheels, the windshield is sloped, the top is curved and the rear tapers far beyond the rear wheels.

The car is now priced at $7,500, but it is reported that one of the large American manufacturers is considering producing the car in large quantities.

DIMEO OF DOEHLER DIE CASTING DEAD AT CLEVELAND

Batavia, N. Y., Sept. 12.—James J. Dimeo, formerly general manager of the local plant of the Doehler Die Casting Corporation, died at his home in Cleveland, O., early this week, following a three years' illness from tuberculosis. In 1924 when the Doehler company began operations here, Mr. Dimeo was appointed general manager, but ill health forced him to resign several years ag-

Equipment - - - Development

Are Three Differentials With 6-Wheel Trucks Essential?

In the current issue of the Moreland Magazine, the house organ of the Moreland Truck Company, Ethelbert Favary, chief engineer, discusses the above question. Extracts from this article follow:

The question as to whether a third differential is useful with six-wheel trucks having two rear driving axles is the subject of considerable discussion. It is positively known that the life of the tires of the four rear driving wheels of six-wheelers is considerably greater than the life of tires of the ordinary four-wheel truck. It is also settled that the six wheeler without the third differential has better traction than if an ordinary third differential were used.

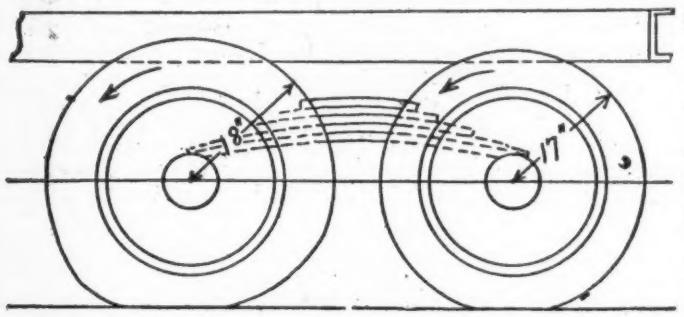


FIG. 1. Showing tendency (exaggerated) of tires to equalize themselves even when their diameters or their air pressures vary considerably

In England, where six-wheel trucks have been used longer and are in common use, the government pays a subsidy to purchasers of six-wheel trucks, and it is stipulated that no third differential must be used. It is sometimes stated that without a third differential there may be considerable road slippage of the four rear wheels.

The proponents of the third differential claim that over uneven road surfaces, when the tires ride over small hills or hollows, some of the tires will be traveling faster than others and therefore the slippage between the tires is less when a third differential is used. In order to further illustrate this point, sometimes a small model of a six-wheel truck is used without a third differential, which rolls down an inclined board. When the surface is smooth the model will coast down; while, if there are hills and hollows on the board, the small model, with solid tires and without any load, will stop.

In practice, conditions are different. Take the two tires of Fig. 1, as an example, representing the two rear tires of a six-wheel truck, and let us assume that the radius of one wheel (with tire) is 18 inches and that of the other wheel 17 inches, and that there is no differential action between these two wheels. As they are both driven at the same speed, there will be a tendency for the larger wheel to travel farther in one revolution than the wheel which has a radius of only 17 inches. The result of this extra tendency will be to cause an extra pull on the rubber and fabric of the larger wheel, since the motive power will tend to drive both wheels at the same speed; the extra pull on the tire will lower the distance between wheel center and road and there will thus be a tendency to establish an equilibrium between the front tire and the rear tire, and it is believed this is one reason for the comparatively small increase in the traction resistance in the experiment mentioned, where the difference in the inflation pressure in the tires of the two rear axles was 20 pounds against 110 pounds. In practice, pressure differences are not as great as this, but, even if they were, there is still another very important reason why there is no great difference in the traction transmitted by the two wheels.

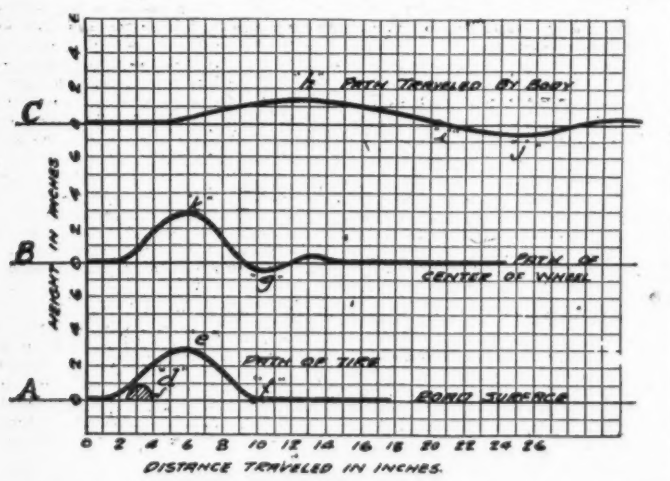


FIG. 2. Chart illustrating spring deflection and effect

A moving picture taken of motor vehicles in operation has shown that a certain amount of slippage takes place continuously between all driving wheel tires and the road surface as well as between braking wheel tires and the road surface even though the brakes be only very slightly applied.

One of the government departments in Washington found that when the brake is applied to automobile wheels even very slightly, slippage between tires and road surface takes place, and the greater the brake application the greater the slippage. Most people were under the impression that the wheels have to be locked before slippage between tires and road surface takes place.

The moving picture taken of the rear wheels of an ordinary four-wheel truck is very illuminating. It shows the path of the tire on the road surface, the path of the center of the wheel and the path traveled by the body, as shown in Fig. 1. When hitting an obstruction the tire will fly upward and come down again to the road some distance behind the obstruction. The horizontal distance described by the tire and the wheel in the air will, of course depend on the speed of travel. The wheel is thrown upward regardless of what shape the obstruction may be. The height to which the wheel is thrown upward will depend on the tires, on the unsprung weight and on the spring suspension. The line A in the illustration represents the road surface, and the heavy line shows the path described by the bottom of the tire. Knowing that a certain amount of slippage takes place continuously between the driving tires and the road surface and tests having demonstrated that the slightest additional resistance applied to any one of the tires will cause additional slippage of that tire, undoubtedly this slippage between the tires and the road surface will largely tend to equalize the traction without a third differential. A slight increase in traction of any one tire will cause a very slight additional slippage of this tire and this will then immediately tend to equalize the driving torque between the two driving axles.

Some of the reasons of the greatly increased tire life of the six-wheelers is due to the lessened impacts between tires and road as well as to the decreased tire slippage. We are referring here to the four rear-wheel drive without a third differential.

A great source of slippage with the ordinary four-wheel truck occurs when one rear wheel rides over an obstruction on the road and the tire leaves the ground. In consequence the engine will begin to race and the tire in the air will spin because the rear wheel on the other side will lose traction for an instant, due to differential gear action. When returning to the road surface, the tire will spin until its speed is reduced to that of the other wheel, which has not left the road.

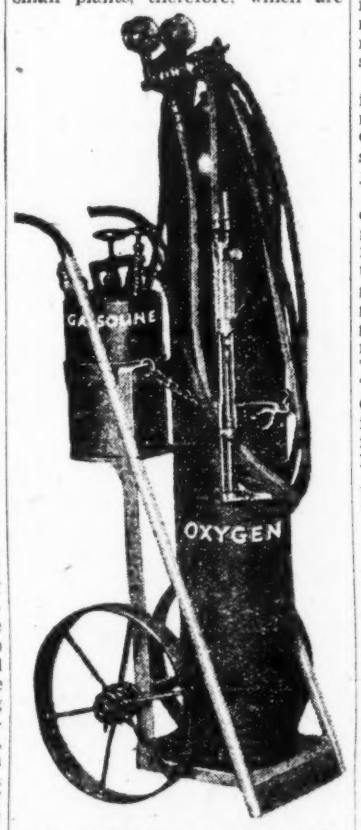
With six-wheelers without a third differential this cannot take place unless one wheel of each axle should lose contact with the ground at the same time.

Metal Cutting Torch Uses Gasoline Fuel

Torchweld Equipment Company, Chicago, manufacturer of a line of acetylene and other fuel gas torches, announces a metal cutting torch which uses gasoline.

The manufacturers claim the following advantages for their equipment.

It makes it possible to use a standard kind of fuel that is familiar to every one and is immediately obtainable anywhere. Many small plants, therefore, which are located in remote places and which hitherto have found it impossible to use metal cutting equipment, can now make profitable use of the gasoline cutting torch.



TORCHWELD metal cutting equipment, which use gasoline fuel

The handling of heavy fuel-gas cylinders is eliminated.

The amount of storage space required is reduced.

The weight of the equipment is reduced 60 per cent. over the fuel tank and oxygen outfit and the smaller truck used is easier to handle in crowded spaces or aisles.

Metal cutting costs are reduced from 30 to 50 per cent.

It eliminates paying for residual gases retained in so-called empty cylinders.

Rental charges on cylinders are eliminated.

Of particular importance, it is claimed, is its speed, and its resulting clean work. The cuts which it makes are conspicuously free from rough, jagged edges or underhung slag.

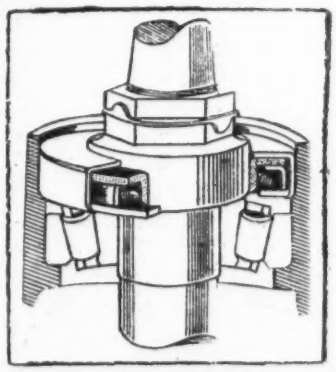
"Flash-backs," it is claimed, are impossible when using this equipment, because a liquid fuel is used. Gasification takes place only in a small chamber immediately adjacent to the tip.

The gasoline cutting torch unit consists of cutting torch, with four gasoline cutting tips; twenty-five feet high pressure oxygen hose, twenty-five feet flexible metalic gasoline hose, two-gallon welded gasoline tank, high pressure two-gauge oxygen cutting cylinder regurator; wrenches, goggles and gloves. This outfit has been perfected by Torchweld Equipment Company of Chicago, long known as makers of improved metal cutting and welding equipment for use with acetylene and all other fuel gases.

New Booklet Issued On Leather Oil Seal

THE Chicago Rawhide Manufacturing Company, Chicago, Ill., has just issued a new booklet describing its self-contained leather oil seal, known as the Perfect Oil Seal. The booklet lists the dimensions of the stock sizes made for use with shafts from ½ inch to 12 inches in diameter.

The manufacturers point out that leather has many advantages over other materials used for lubricant seals for motor vehicles, machine tools and other applications of a similar nature. Among them is the resistance of leather to frictional wear. Properly prepared, leather offers a resistant to the harmful action of heat and of mineral lubricants.



Permanent contact between this packing member and the shaft, spindle or hub on which it seals is uniformly maintained by a specially designed coil type spring shown in the illustration.

Cumulative New Commercial Car Registration Statistics, August, 1930

Returns for today: Delaware, North Dakota and Utah.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Essex	Fargo	Federal	Ford	G. M. C.	International	Mack	Paige	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys	Willys-Knight	Miscellaneous	Totals	States
Delaware	1	1	22		2				50	1	1				1				2			2			2	85	Delaware
Illinois	5	3	360	22	26	1		7	587	12	120	10	1	1	14	3		4	1		3	10	2	3	105	1300	Illinois
N. Dakota			71		3		2		72	2	36												1			187	N. Dakota
Utah			25		2				67	4	4	1			2		1								1	107	Utah
Totals	6	4	478	22	33	1	2	7	776	19	161	11	1	1	17	3	1	4	3		3	12	3	3	108	1679	Totals
Del., 1929			39	1	1				65	4	5	1			2		1		1		2					122	Del., 1929
Ill., 1929	6	9	718	62	92		15	6	1073	46	140	16			33	1		9	2		40	19			106	2393	Ill., 1929
N. D., 1929			142	1	8		3		182	11	77				2					3	8			1		438	N. D., '29
Utah, 1929			68		11		2		155	2	3				5		5				4				1	256	Utah, '29
Totals, '29	6	9	967	64	112		20	6	1475	63	225	17			42	1	6	9	3	3	54	19		1	107	3209	Totals, '29

DEALER DOINGS

Omaha, Neb., Sept. 12.—H. Heath has opened a service station for the care of Auburn and Cord automobiles at 2562 Leavenworth St., the old headquarters of the Omaha Auburn and Cord distributor.

Camden, N. J., Sept. 12.—The Mori-Holland Motor Company, Federal at 22d Street, Hudson-Essex dealer, announces that it will move its used car department to 1129 Haddon Ave., October 1.

Sacramento, Cal., Sept. 12 (UTPS).—Arnold Brothers, Inc., Hudson-Essex distributor here for the Sacramento Valley and northward to the Oregon line, has now added to its field the entire state of Nevada, so that henceforth all Hudson-Essex cars sold in Nevada will be wholesaled out of this city.

Indianapolis, Ind., Sept. 12.—The Boyd Motor Company, organized here last spring to become an associate dealer for Dodge Brothers, has taken the Auburn-Cord line under the Updyke Auto Company. The Boyd company is headed by Merlin Boyd, formerly connected with other dealerships in high executive capacities. The Boyd family has been identified with the local automotive trade for many years.

Louisville, Ky., Sept. 12.—The P. L. Curtis Motor Company, 640 South 3d St., here, has been appointed dealer and distributor for Dodge motor cars, to fill a vacancy caused by resignation of the Range Motor Company, Harry G. Range, president, which some weeks ago decided to discontinue in this city and give full attention to its Johnson City, Tenn., division.

Winter Park, Fla., Sept. 12.—Construction work was started a few days ago on the new home of the Standard Auto Company on East Park Avenue.

Newark, N. J., Sept. 12.—Ashley B. Dunbar, the new Oldsmobile and Viking dealer for Hudson county, who will head the Dunbar Oldsmobile Corporation at 3257 Boulevard, Jersey City, has long been associated with Oldsmobile. Mr. Dunbar will have as his associate Frank Duffy, who will be secretary and treasurer, and will handle all finances. Henry Cenarro, an old Oldsmobile man, will be sales manager. Lloyd Campbell will be service manager.

Des Moines, Ia., Sept. 12.—Wetherall-McIninch, Inc., which for the last year has been the local dealer for Packard automobiles in fifty-nine Iowa counties, has added the distribution of Buick to its line.

Personal Briefs

Newark, N. J., Sept. 12.—Glen W. Tisdale, local Hupmobile distributor, and Mrs. Tisdale have returned home after a vacation at Skaneateles Lake, N. Y.

San Francisco, Cal., Sept. 12 (UTPS). — Austin-San Francisco Company, northern California distributor of the Austin car, announces the appointment of Robert L. Marston as assistant sales manager. Marston has been in the automobile business in California for the past fifteen years in various capacities.

Vancouver, B. C.—Sept. 12.—Horace Everett, assistant general manager Vancouver Motors, Ltd., here, has now returned to the coast after over a month's tour through various parts of Alberta.

Boston, Mass., Sept. 12.—John R. Farley has been appointed general manager of the Cottage Farm Motor Sales, Inc., distributor of De Soto cars in New England. Mr. Farley was for the past two years sales manager of the Commercial Credit Company and wholesale manager of Kilbourne Motor Sales. He was also at one time assistant branch manager of Willys-Overland in New England territory. He will be assisted by Frank Marr, for the past two years associated with the Chrysler factory organization in New England.

MAJOR SPECIFICATIONS AND MECHANICAL DETAILS

MAKE AND MODEL	Weight—5-P. Sedan	Wheel Base	Engine Make	Fan Belt Type	Thermostat Used	Valve Arrangement	Cylinders	Bore and Stroke	Piston Disp.	Compression Ratio	Tax H. P.	Brake, H. P. and Peak R. P. M.	Plst. Make or Material	No. Main Br.	Oil Purifier	Fuel Clean'r	Carburetor	Air Cleaner
Auburn 6-85	3255	120	Lyc	V	Dole	L	6	2⅞x4¾	185	*5.16	19.8	70@3400	*Alum	4	No	No	Sch	No
Auburn 8-95	3510	125	Lyc	V	Dole	L	8	2⅞x4¾	246	*5.15	26.4	95@3300	*Alum	5	Pur	AC	Sch	No
Auburn 125	3908	130	Lyc	V	Dole	L	8	3¼x4½	299	*5.25	33.8	125@3600	*Alum	5	Pur	AC	Sch	No
Austin	§1130	75	Own	F	——	L	4	2.2x3	45.8	5.1	7.8	13@3000	Alum	2	—	—	Til	—
Blackhawk 6	4320	127½	Own	—	Bish-Bab	O	6	3⅜x4½	241.5	5.10	27.3	85@3150	*Alum	7	Wal	AC	Zen	Un
Blackhawk 8	4185	127½	Own	V	Bish-Bab	L	8	3 x4¾	268.5	5.50	28.8	88@3200	*Alum	5	Wal	AC	Zen	AM
Buick 8-50	3170	114	Own	V	Dole	O	8	2⅞x4¼	220.7	4.8	26.45	77@3200	CI	5	AC	—	Mar	AC
Buick 8-60	3795	118	Own	V	Dole	O	8	3⅛x4⅝	272.6	4.63	30.02	90@3000	CI	5	AC	—	Mar	AC
Buick 8-80	4255	124	Own	V	Dole	O	8	3⅜x5	344.8	4.5	35.12	104@2800	CI	5	AC	—	Mar	AC
Buick 8-90	4340	132	Own	V	Dole	O	8	3⅜x5	344.8	4.5	35.12	104@2800	CI	5	AC	—	Mar	AC
Cadillac 353	5055	*210	Own V	V	Yes	LV	8	3⅜x4⅛	353	5.15	36.5	95@3000	CI	3	AC	Gas	Own	—
Cadillac 452	6100	148	Own	V	Yes	O	16	3 x4	452.0	5.50	57.5	165@3400	CI	5	AC	Gas	Own	None
Chevrolet	2500	107	Own	V	Yes	O	6	3⅛x3¾	194.0	5.01	26.3	46@2600	CI	3	—	AC	Car	AC
Chrysler 6	2745	*169¼	Own	V	Yes	L	6	3⅛x4¼	195.6	5.29	23.44	62@3200	*Alum	4	—	Yes	Car	—
Chrysler 70	3435	*168½	Own	V	Yes	L	6	3⅜x5	268.4	5.00	27.34	93@3200	*Alum	7	Pur	AC	Str	Un
Chrysler 66	2850	*163¼	Own	V	——	L	6	3⅛x4¾	218.6	5.00	23.43	68@3000	Alum	7	Pur	AC	Str	Un
Chrysler 8	——	*186⅛	Own	V	Yes	L	8	3 x4¼	240.3	5.20	28.8	80@3400	*Alum	5	Yes	—	Str	Yes
Chrysler Imp. 8	——	*210⅜	Own	V	Yes	L	8	3½x5	384.8	5.01	39.2	125@3200	*Alum	9	Yes	—	Str	Yes
Cord (Fr. Wh. D.)	4530	137½	Lyc	V	——	L	8	3¼x4½	298.6	5.25	33.8	125@3600	*Alum	5	Yes	AC	Sch.	—
De Soto 6	2705	*168⅛	Own	V	Yes	L	6	3⅛x4⅛	189.81	5.20	23.44	60@3400	*Alum	4	—	AC	Car	Un
De Soto 8	2965	*177	Own	V	Yes	L	8	2⅞x4	207.7	5.20	26.45	70@3400	*Alum	5	—	AC	Str	Yes
Dodge Six D D	2668	*168⅝	Own	V	Yes	L	6	3⅛x4⅛	189.8	5.20	23.4	60@3400	*Alum	4	No	No	Car	—
Dodge 8	3043	*176⅞	Own	V	Yes	L	8	2⅞x4¼	220.7	5.20	26.45	75@3400	*Alum	5	Pur	No	Str	Un
Durant 6-14	2950	*172¼-176	Con	V	Bish-Bab	L	6	3¼x4	199	5.32	25.4	58@3100	*Alum	4	AC	AC	Str	AC
Durant 6-17	3290	*175¾-179½	Con	V	Bish-Bab	L	6	3⅝x4⅝	248	5.06	27.34	70@3000	*Alum	7	Ac	AC	Str	AC
Elcar 6-75	2942	117	Lyc	V	Yes	L	6	2⅞x4¾	185	5.25	19.8	61@3000	*Alum	4	Pur	Gas	Sch	—
Elcar 140 and 130	3980	135-130	Con	V	Yes	L	8	3⅜x4½	322	5.25	36.45	140@3300	*Alum	5	Pur	Gas	Sch	—
Elcar 8-95-96	3299	123	Lyc	V	Yes	L	8	2⅞x4¾	246.7	5.25	26.5	90@3000	*Alum	5	Pur	Gas	Sch	—
Essex	2805	113	Own	V	——	†L	6	2¾x4½	160.4	5.80	18.15	60@3600	Alum	3	—	Ste	Mar	AC
Ford A	2336	103½	Own	V	——	L	4	3⅞x4¼	200.5	4.22	24.03	40@2200	Alum	3	—	AC	Zen	—
Franklin 145	3930	125	Own	—	Bish-Bab	*O	6	3½x4¾	274	5.30	29.4	95@3000	Alum	7	AC	AC	Str	AC
Franklin 147	4060	132	Own	—	Bish-Bab	*O	6	3½x4¾	274	5.30	29.4	95@3000	Alum	7	AC	AC	Str	AC
Gardner 136	3330	122	Lyc	V	Dole	L	6	2⅞x4¾	185	5.05	19.8	70@3500	*Alum	4	Pur	Gas	Sch	—
Gardner 140	3500	125	Lyc	V	Dole	L	8	2⅞x4¾	246.6	5.15	26.5	90@3300	*Alum	5	Pur	Gas	Sch	AM
Gardner 150	3890	130	Lyc	V	Dole	L	8	3¼x4½	298.6	5.25	33.8	126@3300	*Alum	5	Pur	Gas	Sch	AM
Graham Std. 6	3175	115	Own	F	Dole	L	6	3⅛x4½	207	5.41	23.44	66@3200	Alum	7	No	AC	DL	AC
Graham Spl. 6	3390	115	Own	F	Dole	L	6	3¼x4½	224	5.49	25.35	76@3400	*Alum	7	AC	AC	DL	AC
Graham Std. 8	3795	122	Own	V	Bish-Bab	L	8	3¼x4½	298	5.20	33.80	100@3400	*Alum	5	AC	AC	DL	AC
Graham Spl. 8	3875	122	Own	V	Bish-Bab	L	8	3¼x4½	298	5.20	33.80	100@3400	*Alum	5	AC	AC	DL	AC
Graham Cust. 8	4300	127	Own	F	Bish-Bab	L	8	3⅜x4½	322	5.41	36.45	120@3200	*Alum	5	AC	AC	John	AC
Graham Cust. 8	4405	137	Own	F	Bish-Bab	L	8	3⅜x4½	322	5.41	36.45	120@3200	*Alum	5	AC	AC	John	AC
Hudson Super 8	3200	119-126	Own	V	——	L	8	2¾x4½	213.8	5.80	24.2	80@3600	Alum	5	—	Ste	Mar	AC
Hupmobile Cen. 6	2905	——	Own	V	——	L	6	3¼x4¼	211.6	5.10	25.35	70@3200	Alum	4	—	Ste	Str	—
Hupmobile Cen. 8	3175	——	Own	V	Pines	L	8	2⅞x4⅝	240.2	5.20	26.45	90@3200	Alum	5	—	Ste	Str	—
Hupmobile C	3725	——	Own	V	No	L	8	3 x4¾	268.6	5.20	28.8	100@3200	CI	5	Pur	Gas	Str	Yes
Hupmobile H & U	4000	——	Own	—	No	L	8	3½x4¾	365.6	5.20	39.2	133@3400	Alum	5	Pur	Ste	Str	AM
Jordan St. Line 80	3490	120	Con	V	Pines	L	8	2⅞x4¾	246.7	5.10	26.5	80@3000	*Alum	5	Ste	AC	Str	AC
Jordan G. Ninety 8	3700	125	Con	V	Pines	L	8	3 x4¾	268.6	5.10	28.9	85@3200	*Alum	5	Ste	Ste	Str	AM
La Salle	4645	*201	Own	V	Yes	LV	8	3⅜x4⅛	340	5.18	35.1	90@3000	CI	3	AC	Gas	Own	—
Lincoln	5030	136	Own	V	——	L	8	3½x5	384	4.83	39.2	90@2800	Alum	5	Pur	Own	Str	Un
Marmon-Roosevelt	2833	*172	Own	V	Dole	L	8	2⅞x4¼	201.9	5.25	24.2	77@3400	Alum	5	—	—	Str	AC
Marmon Eight 69	3103	*180	Own	V	——	L	8	2⅞x4¼	211.2	5.50	25.4	84@3400	Alum	5	AC	AC	Sch	AC
Marmon Eight 79	4028	*191	Own	V	Pines	L	8	3⅛x4¾	303.2	5.50	32.5	110@3400	Alum	5	AC	AC	Sch	AC
Marmon Big Eight	4363	*202	Own	V	Pines	L	8	3¼x4¾	315.2	5.50	33.8	125@3400	Alum	5	AC	AC	Sch	AC
Nash Single Six	2850	114¼	Own	V	Pines	L	6	3⅛x4⅜	201.3	5.00	23.4	60@2800	*Alum	7	AC	AC	Car	AC
Nash Twin Ig. 6	3535	118-128¼	Own	V	Pines	L	6	3⅜x4½	242	5.00	27.3	74@2800	*Alum	7	AC	AC	Mar	AC
Nash Twin Ig. 8	4000	124-133	Own	V	Pines	L	8	3¼x4½	298.6	5.25	33.8	100@3200	*Alum	9	AC	AC	Mar	AC
Oakland V-8	3095	117	Own	V	Yes	H	8	3⅛x3⅜	251.0	5.00	37.8	85@3000	CI	3	—	AC	Mar	AC
Oldsmobile	2940	113½	Own	V	——	L	6	3⅛x4⅛	197.5	5.20	24.4	62@3000	CI	4	AC	AC	John	AC
Packard 726-733	4255	127½-134½	Own	V	Own	L	8	3⅛x5	320	—	32.5	90@3200	*Alum	9	Pur	Yes	Own	Own
Packard 740-745	4560	140½-145½	Own	V	Own	L	8	3½x5	384.8	—	39.2	106@3200	*Alum	9	Pur	Yes	Own	Own
Peerless St. 8	3642	118	Own	V	Bish-Bab	L	8	2⅞x4¾	246.0	5.00	26.45	85@3200	*Alum	5	Pur	AC	Sch	AC
Peerless Master 8	4521	125	Own	V	Bish-Bab	L	8	3⅜x4½	322	5.00	36.4	115@3200	*Alum	5	Pur	AC	Sch	AC
Peerless Custom 8	4800	138	Own	V	Bish-Bab	L	8	3⅜x4½	322	5.00	36.4	120@3200	*Alum	5	Pur	AC	Sch	AC
Pierce-Arrow	4523	132	Own	V	Yes	L	8	3⅜x4¾	340	5.07	36.45	115@3000	*Alum	9	Yes	Yes	Str	Un
Pierce-Arrow	4304	134	Own	V	Yes	L	8	3½x4¾	366	5.07	39.2	125@3000	*Alum	9	Yes	Yes	Str	Un
Pierce-Arrow	4713	139	Own	V	Yes	L	8	3½x4¾	366	5.07	39.2	125@3000	*Alum	9	Yes	Yes	Str	Un
Pierce-Arrow	4831	144	Own	V	Yes	L	8	3½x5	385	5.07	39.2	132@3000	*Alum	9	Yes	Yes	Str	Un
Plymouth	2595	*167	Own	V	——	L	4	3⅜x4¾	196	4.60	21.03	48@2800	*Alum	3	—	Yes	Car	—
Pontiac	2695	110	Own	V	Var	L	6	3⅛x3⅞	200.0	4.90	26.3	60@3000	S St	3	—	AC	Mar	Yes
Reo 15	3300	115	Con	V	Dole	L	6	3⅜x4	214.7	5.50	27.3	60@2800	*Alum	7	—	—	Sch	Un
Reo 20	3700	120	Own	V	Bish-Bab	L	6	3⅜x5	268.3	5.30	27.3	80@3200	Alum	7	Han	—	Sch	Un
Reo 25	3795	124	Own	V	Bish-Bab	L	6	3⅜x5	268.3	5.30	27.3	80@3200	Alum	7	Han	—	Sch	Un
Ruxton Fr.Wh. Dr.	4000	130	Own	V	Yes	L	8	3 x4¾	268.6	5.09	28.8	100@3400	*Alum	5	Yes	AC	Zen	AM
Studebaker Six	2950	114	Own	V	Dole	L	6	3¼x4	205.3	5.20	25.4	70@3200	CI	4	Han	Ste	Sch	—
Studebaker Dict. 8	3095	115	Own	V	Dole	L	8	3⅛x3¾	221.0	5.00	30.0	72@3200	*Alum	9	Pur	AC	Str	AM
Studebaker Com. 8	3525	124	Own	V	Dole	L	8	3⅛x4¼	250.4	5.20	30.0	101@3200	*Alum	9	Han	Ste	Str	AM
Studebak'r Pres. 80	4230	130	Own	V	Dole	L	8	3½x4⅜	337	5.10	39.2	122@3200	*Alum	9	Han	Ste	Str	AM
Studebaker Pres. 90	*4360	136	Own	V	Dole	L	8	3½x4⅜	337	5.10	39.2	122@3200	*Alum	9	Han	—	Str	AM
Stutz	4918	134½-145	Own	—	Yes	O	8	3⅜x4½	322	5.10	36.5	112@3300	*Alum	9	Wal	Gas	Zen	AM
Viking Eight	3620	125	Own	V	Yes	H	8	3⅜x3⅝	259.5	5.10	36.5	81@3200	CI	3	Own	AC	John	AC
Windsor 6-69	3195	120	Con	V	Dole	L	6	2⅞x4¾	185	5.00	19.8	47.5@2600	*Alum	4	AC	—	Str	—
Windsor 6-72	2930	120	Con	V	Dole	L	6	3⅜x4	215	4.94	27.3	66@3200	*Alum	7	AC	—	Str	—
Windsor 6-77	2930	120	Con	V	Dole	L	6	3⅜x4	215	4.94	27.3	66@3200	*Alum	7	AC	—	Str	—
Windsor 8-85	3600	125	Con	V	Dole	L	8	3 x4¾	269	5.00	28.8	85@3100	*Alum	5	AC	Gas	Str	AC
Windsor 8-92	3600	125	Con	V	Dole	L	8	3 x4¾	269	5.00	28.8	85@3100	*Alum	5	AC	Gas	Str	AC
Whippet 96 A	2412	103¼	Own	V	No	L	4	3⅛x4¾	145.7	5.40	15.6	40@3200	*Alum	3	No	No	Til	No
Whippet 98 A	2693	112½	Own	V	Dole	L	6	3⅛x3⅞	178.3	5.12	23.4	50@3000	*Alum	7	No	Til	Til	Til
Willys Six 98-B	2641	110	Own	V	Var	L	6	3¼x3⅞	193	5.56	25.3	65@3400	CI	4	No	Til	Til	Til
Willys 8-80	3114	120	Con	V	Var	L	8	3⅛x4	245.4	5.40	31.25	80@3200	CI	5	No	Til	Til	Til
Willys-Knt. 66-B	3934	120	Own	V	Var	K	6	3⅜x4¾	255	5.50	27.3	87@3200	*Alum	7	Ski	Til	Til	Til
Willys-Knight 87	2989	112½-115	Own	V	Var	K	6	2⅞x4⅜	177.9	5.88	20.7	55@3000	*Alum	7	Ski	Til	Til	Til

Weight—*Studebaker 7-pass. sedan. †On Elcar 140 4,375 pounds. §Austin Standard 2-passenger coupe.

Wheel Base—*Over all length of chassis instead of wheel base.

Engine Make—Con, Continental; Lye, Lycoming.

Fan Belt Type—V, V-type; F, flat; C, cone.

Thermostat—Bish-Bab, Bishop & Babcock; Dole, Dole Valve Co., Chicago, Ill.; Pines, Pines Winterfront; Var, various makes

Valve Arrangement—L, L head; H, horizontal; O, overhead; K, sleeve valve. LV, V-type L head.
*Air cooled †Thermo syphon water circulation.

Piston Material—*Alum, aluminum with invar struts; Alu u, aluminum alloy; CI, cast iron; S St, semi-steel.

Compression Ratio—*Optional on the Auburn.

Oil Purifier—Pur, Purolator; Wal, Wall; Han, Handy; AC, AC Spark Plug Company; Gas, Gascolator; Ste, Stewart-Warner; Til, Tilotson.

Carburetor—Sch, Wheeler Schebler; Zen, Zenith; Mar, Marvel; Car, Carter; Str, Stromberg; DL, Detroit Lubricator; John, Johnson; Til, tilotson.

Air Cleaner—AC, AC Spark Plug Company; AM, Air Maze; Un, United; Han, Handy; Til, Tilotson.

Front End Drive—Link, Link Belt; Tex, Texolite; Cel, Celeron; Ram, Ramsey; Whit, Whitney Chain; Diam, Diamond Chain; Morse, Morse Chain Company; Var, various makes of chains; Var-G, various makes of gears.

Steering Gear—Gem, Gemmer; Ross Gear.

Ignition, Generator and Starter—Aut-L, Auto-Lite; Del-R, Delco-Remy; N E, North East; Dyn, Dyneto.
*Bendix starter drive used.

Clutch—Borg, Borg & Beck; Br-L, Brown-Lipe; Rock, Rockford Machine; Russ, Russell; Long, Long Clutch Company.

Gearset—War, G. Warner Gear Company; Detr, Detroit Gear; Mun, Muncie Gear. *Three or four speed gear sets as shown are available for either model; WC, Warner Corporation.

Universals—Un P, Detroit Universal Products Company; Spic, Spicer Manufacturing Corporation; MM, Mechanics Universal Joint Company, Rockford, Ill.; Cle, Cleveland; Fab, Fabric.

Rear Axle—Col, Columbia; Sal, Salisbury; Cla, Clark Equipment Company; Tim, Timken.

Steering Gear—Gem, Gemmer; Ross Gear and Tool Company; Sag, Saginaw; Sav-B, Saylor-Beall Manufacturing Company, Detroit, Mich.; War, Warner

Brakes—H, hydraulic; M, mechanical; SD, steeldraulic; Bendix, Bendix Brake Corporation. *Bendix front; own rear.

Rear Springs—S, semi-elliptic; El, full elliptic; ant, semi-cantilever.

Spring Shackles—Tryon, Tryon Spring Shackle Company; Rub B, rubber block; Chain; Faf, Fafnir; O-N, Henry Manufacturing Company, Moline, Ill.; Belf, Belfes Corporation.

Chassis Lubricator—Alem, Alemite; Al-Z, Alemite Zerk; Alem A, Alemite automatic; Bijur, Bijur chassis lubricator; Cen, central magazine.

Tires—*Packard 733 cars equipped with 20x6.50. Stutz 134½ wheel base has 33x6.50.

OF PRESENT AMERICAN PASSENGER CAR MODELS

Make and Model	Front End Drive	Ignition System	Gen. and Starter	Clutch	Gear Set and Speeds	Universals	Rear Axle	Ratio	Brakes	Steering Gear	Springs Rear	Spring Shackles	Chassis Lubric.	Tires
Auburn 6-85	Link	Del-R	*Del-R	Long	War 3	Un P	Col ½	*4.9	H	Ross	S 56¾	Own	Bijur	18x5.50
Auburn 8-95	Link	Del-R	*Del-R	Long	War 3	Un P	Col ½	*4.7	H	Ross	S 56¾	Own	Bijur	18x6.00
Auburn 125	Link	Del-R	*Del-R	Long	Detr 3	Un P	Col ½	*4.45	H	Ross	S 56¾	Own	Bijur	18x6.50
Austin	Gear	Aut-L	*Aut-L	Rock	War-G 3	Spic	Sal	5.25	Mech	Say B	Cant	Own	Zerk	18x3.75
Blackhawk 6	Link	Del-R	Del-R	Borg	Detr 4	Un P	Sal ½	4.75	H	Gem	S 60	Own	Bijur	31x6.00
Blackhawk 8	Link	Del-R	*Del-R	Borg	Detr 4	Un P	Sal ½	4.75	H	Gem	S 60	Own	Bijur	31x6.00
Buick 8-50	Tex	Del-R	Del-R	Own	Own 3	Own	Own ½	4.54	M	Sag	S 54½	Own	Al-Z	18x5.25
Buick 8-60	Tex	Del-R	Del-R	Own	Own 3	Own	Own ¾	4.45	M	Sag	S 55¼	Own	Al-Z	19x5.50
Buick 8-80	Tex	Del-R	Del-R	Own	Own 3	Own	Own ¾	4.27	M	Sag	S 58⅞	Own	Al-Z	19x6.50
Buick 8-90	Tex	Del-R	Del-R	Own	Own 3	Own	Own ¾	4.27	M	Sag	S 58⅞	Own	Al-Z	19x6.50
Cadillac 353	Morse	Del-R	Del-R	Own	Own 3	Spic	Own ¾	5.08	Own-M	Own	S 60	Own	Alem	19x7.00
Cadillac 452	Morse	Del-R	Del-R	Own	Own 3	Spic	Own ¾	4.39	Own	Own	S 60	Own	Alem	19x7.00
Chevrolet	Var	Del-R	*Del-R	Own	Own 3	Own	Own ½	3.82	M	Own	S 54	Tryon	Alem	19x4.75
Chrysler 6	Morse	Del-R	Del-R	Own	Own 3	Un P	Own ½	4.6	H	War	S 53¾	Tryon	Al-Z	19x5.00
Chrysler 70	Morse	Del-R	Del-R	Own	Own 4	Un P	Own ½	3.82	H	War	S 57¾	Rub B	Al-Z	18x5.50
Chrysler 66	Morse	Del-R	Del-R	Own	Own 3	Un P	Own ½	4.70	H	War	S 54⅝	Rub B	Al-Z	18x5.50
Chrysler 8	Morse	Del-R	Del-R	—	Own 4	—	Own ½	4.10	H	——	S 54⅝	——	Al-Z	18x5.50
Chrysler Imperial 8	Morse	Del-R	Del-R	—	Own 4	—	Own ½	3.81	H	——	S 58½	——	Al-Z	18x7.00
Cord (Fr. Wh. Dr.)	Link	Del-R	*Del-R	Long	Det 3	UnP&MM	Col F	4.41	H	Gem	S 62	Own	Bijur	18x7.00
De Soto 6	Morse	Del-R	Del-R	Borg	Own 3	Un P	Own ½	4.6	H	War	S 53¾	Tryon	Al-Z	19x5.00
De Soto 8	Morse	Del-R	Del-R	Borg	Own 3	Un P	Own ½	4.6	H	War	S 54⅝	Rub B	Al-Z	19x5.25
Dodge 6 D D	Morse	Del-R	Del-R	Borg	Own 3	Un P	Own ½	4.9	H	War	S 53¾	Tryon	Al-Z	19x5.00
Dodge 8	Morse	Del-R	Del-R	Borg	Own 3	Un P	Own ½	4.6	H	War	S 54⅝	Rub B	Al-Z	18x5.50
Durant 6-14	Morse	Aut-L	*Aut-L	Borg	Own 3	Spic	Own ½	4.4	S D	Own	S 55	Tryon	Alem	29x5.00
Durant 6-17	Morse	Aut-L	*Aut-L	Borg	Own 4	Spic	Own ½	3.72	S D	Own	S 55	Tryon	Alem	29x5.50
Elcar 6-75	Link	Del-R	*Del-R	Long	War-G 3	Spic	Sal ½	4.88	H	Ross	S 53½	Belf	Alem	29x5.00
Elcar 140 and 130	Link	Del-R	*Del-R	Long	War-G 4	Spic	Sal ½	...	H	Ross	S 57	Belf	Alem	30x7.00
Elcar 8-95-96	Link	Del-R	*Del-R	Long	War-G 3	Spic	Sal ½	4.90	H	Ross	S 56	Belf	Alem	29x5.50
Essex	Morse	Del-R	*Aut-L	Own	Own 3	Spic	Own ½	5.4	Bendix	Gem	S 54⅝	Own	Alem	19x5.00
Ford A	Cel	Own	*Own	Own	Own 3	Own	Own ¾	3.7	M	Gem	S Tr	Own	Al-Z	19x4.75
Franklin 145	Ram	Del-R	*Del-R	Br-L	*Detr 4	Spic	Own ½	4.54	H	Gem	El 42	None	Al-Z	19x6.50
Franklin 147	Ram	Del-R	*Del-R	Br-L	Detr 4	Spic	Own ½	4.73	H	Gem	El 42	None	Al-Z	19x6.50
Gardner 136	Link	Del-R	*Del-R	Borg	War-G 4	Spic	Col ½	4.45	H	Ross	S 54	O-N	Alem	29x5.50
Gardner 140	Link	Del-R	*Del-R	Borg	War-G 3	Spic	Col ½	4.45	H	Ross	S 54	O-N	Alem	29x5.50
Gardner 150	Link	Del-R	*Del-R	Borg	War-G 3	Spic	Col ½	4.45	H	Ross	S 57	O-N	Alem	30x6.50
Graham Std. 6	Link	Del-R	*Del-R	Long	War-G 3	Un P	Sal ½	4.7	H	Ross	S 54	Tryon	Al-Z	19x5.00
Graham Spl. 6	Link	Del-R	*Del-R	Long	War-G 4	Un P	Sal ½	3.91	H	Ross	S 54	Tryon	Al-Z	18x5.50
Graham Std. 8	Link	Del-R	Del-R	Long	W C 3	Un P	Sal ½	4.45	H	Ross	S 56	Rub B	Al-Z	18x6.00
Graham Spl. 8	Link	Del-R	Del-R	Long	War-G 4	Un P	Sal ½	3.90	H	Ross	S 56	Rub B	Al-Z	18x6.00
Graham Cust. 8	Link	Del-R	Del-R	Long	War-G 4	Un P	Cla ½	3.64	H	Ross	S 58	Own	Bijur	19x6.50
Graham Cust. 8	Link	Del-R	Del-R	Long	War-G 4	Un P	Cla ½	3.92	H	Ross	S 58	Own	Bijur	19x6.50
Hudson Super 8	Morse	Del-R	*Aut-L	Own	Own 3	Spic	Own ½	4.6	Bendix	Gem	S 54⅝	Own	Alem	18x5.50
Hupmobile Cen 6	Morse	Aut-L	*Aut-L	Borg	Detr 3	—	Sal	——	S D	Ross	S 53	——	Al-Z	19x5.50
Hupmobile Cen 8	Morse	Aut-L	*Aut-L	Borg	Detr 3	—	Sal	——	S D	Ross	S 52¾	——	Al-Z	19x5.50
Hupmobile C	Morse	Aut-L	*Aut-L	Long	Detr 3	Un P	Own ½	4.36	S D	Ross	S 54	Own	Alem	31x6.00
Hupmobile H and U	Morse	Aut-L	*Aut-L	Long	Detr 3	Un P	Own ½	4.07	S D	Ross	S 57	Own	Alem	19x6.50
Jordan St. Line 80	Morse	Aut-L	*Aut-L	Long	War-G 3	Cle	Col ½	4.9	H	Gem	S 55¾	O-N	Alem	28x5.50
Jordan Grt. Ninety 8	Morse	Aut-L	*Aut-L	Long	War-G 3	Cle	Col ½	4.25	H	Gem	S 55¾	O-N	Alem	30x6.00
La Salle 340	Morse	Del-R	Del-R	Own	Own 3	Spic	Own ¾	4.54	Own-M	Own	S 58	Own	Alem	19x6.50
Lincoln	Morse	Del-R	Del-R	Own	Own 3	Spic	Tim F	4.58	Bendix	Gem	S 60	Own	Alem	20x7.00
Marmon-Roosevelt	Diam	Del-R	*Del-R	Rock	War-G 3	Spic	Sal ½	4.9	Bendix	Ross	S 54⅛	Tryon	Al-Z	19x5.50
Marmon Eight-69	Diam	Del-R	*Del-R	Rock	War-G 3	Spic	Sal ½	4.9	Bendix	Ross	S 56⅛	Rub B	Al-Z	19x5.50
Marmon Eight-79	Diam	Del-R	*Del-R	Rock	Detr 3	Spic	Sal ½	4.7	Bendix	Ross	S 60	Rub B	Al-Z	19x6.00
Marmon Big 8	Diam	Del-R	*Del-R	Rock	War-G 4	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B	Al-Z	19x6.50
Nash Single Six	Cel	Aut-L	*Aut-L	Borg	Own 3	Fab	Own ½	4.7	S D	Ross	S 50⅞	Tryon	Alem A	29x5.00
Nash Twin Ig. 6	Cel	*Aut-L	*Aut-L	Borg	Own 3	Own	Own ½	4.5	Bendix	Gem	S 54	Own	Bijur	29x5.50
Nash Twin Ig. 8	Diam	*Aut-L	*Aut-L	Borg	Own 3	Own	Own ½	4.5	Bendix	Gem	S 56¾	Own	Bijur	31x6.50
Oakland V-8	Morse	Del-R	Del-R	Own	Own 3	MM	Own ½	4.42	M	Sag	S 54½	Tryon	Al-Z	28x5.50
Oldsmobile	Var	Del-R	Del-R	Borg	Mun 3	Un P	Own ½	4.54	Own	Sag	S 54½	Tryon	Alem	28x5.25
Packard 726-733	Morse	N E	*Dyn	Own	Own 4	MM	Own ½	4.38	Bendix	Own	S 56	Own	Cen	*20x6.00
Packard 740-745	Morse	N E	*Dyn	Own	Own 4	MM	Own ½	4.38	Bendix	Own	S 62	Own	Cen	19x7.00
Peerless St. 8	Link	Aut-L	*Aut-L	Rock	War-G 3	Spic	Sal ½	4.7	Bendix	Ross	S 56⅞	Rub B	Alem	29x5.50
Peerless Master 8	Link	Aut-L	*Aut-L	Rock	War-G 4	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B	Alem	31x6.00
Peerless Custom 8	Link	Aut-L	*Aut-L	Rock	War-G 4	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B	Alem	31x6.50
Pierce-Arrow	Morse	Del-R	Del-R	Long	Own 4	Spic	Own ½	4.58	Bendix	Gem	S 60	Faf	Al-Z	19x6.50
Pierce-Arrow	Morse	Del-R	Del-R	Long	Own 4	Spic	Own ½	4.08	Bendix	Gem	S 60	Faf	Al-Z	18x7.00
Pierce-Arrow	Morse	Del-R	Del-R	Long	Own 4	Spic	Own ½	4.42	Bendix	Gem	S 60	Faf	Al-Z	18x7.00
Pierce-Arrow	Morse	Del-R	Del-R	Long	Own 4	Spic	Own ½	4.42	Bendix	Gem	S 60	Faf	Al-Z	18x7.00
Plymouth	Cel	Del-R	Del-R	Rock	Own 3	Own	Own ½	4.37	H	War	S 53⅜	Tryon	Al-Z	19x4.75
Pontiac	Morse	Del-R	Del-R	Own	Own 3	MM	Own ½	4.42	M	Sag	S 54	Tryon	Al-Z	29x5.00
Reo 15	Link	Del-R	Del-R	Borg	War-G 3	Spic	Sal ½	4.45	H	Ross	S 55	Rub B	Al-Z	18x5.50
Reo 20	Morse	Aut-L	Del-R	Russ	Own 3	Detr	Own ½	4.07	H	Ross	S 55	Rub B	Al-Z	18x6.00
Reo 25	Morse	Aut-L	Del-R	Long	Own 3	Detr	Own ½	4.42	H	Ross	S 55	Rub B	Al-Z	18x6.50
Ruxton (Fr. Wh. Dr.)	Link	Aut-L	*Aut-L	Long	Own 3	Own	Own	4.25	H	Gem	S 55	Own	Alem	31x6.00
Studebaker Six	Whit	Del-R	*Del-R	Long	Own 3	Spic	Own ½	4.73	Bendix	Ross	S 54	Tryon	Alem	19x5.25
Studebaker Dict. 8	Var G	Del-R	*Del-R	Long	War-G 3	Spic	Own ½	5.11	Bendix	Ross	S 54	Own	Alem	19x5.50
Studebaker Com. 8	Var G	Del-R	*Del-R	Long	Own 3	Spic	Own ½	4.73	Bendix	Ross	S 56	Faf	Al-Z	19x6.00
Studebaker Pres. 80	Var G	Del-R	Del-R	Long	Own 3	Spic	Own ½	4.31	Bendix	Ross	S 60	Faf	Al-Z	19x6.50
Studebaker Pres. 90	Var G	Del-R	Del-R	Long	Own 3	Spic	Own ½	4.31	Bendix	Ross	S 60	Faf	Al-Z	19x6.50
Stutz M	Link	Del-R	Del-R	Borg	Detr 4	MM	Tim ½	4.5	H	Gem	S 62¼	Own	Bijur	32x7.00
Viking Eight	Whit	Del-R	Del-R	Borg	Mun 3	MM	Own ¾	4.63	Bendix	Sag	S 58	Tryon	Alem	30x6.00
Windsor 6-69	Morse	Aut-L	*Aut-L	Borg	War-G 3	MM	Col ½	4.9	H	Ross	S 54	O-N	Alem	29x5.25
Windsor 6-72	Link	Del-R	*Del-R	Borg	War-G 3	MM	Col ½	4.9	H	Ross	S 54	O-N	Alem	29x5.50
Windsor 6-77	Link	Del-R	*Del-R	Borg	War-G 4	MM	Col ½	3.9	H	Ross	S 54	O-N	Alem	29x5.50
Windsor 8-85	Link	Del-R	*Del-R	Borg	War-G 3	MM	Col ½	4.63	H	Ross	S 54	Own	Alem	31x6.00
Windsor 8-92	Link	Del-R	*Del-R	Borg	War-G 4	MM	Col ½	3.9	H	Ross	S 54	Own	Alem	31x6.50
Whippet 96 A	Morse	Aut-L	*Aut-L	Borg	Own 3	MM	Own ½	4.55	*Bendix	Own	S 49⅛	Tryon	Alem	19x4.75
Whippet 98 A	Morse	Aut-L	*Aut-L	Rock	Own 3	MM	Own ½	4.55	*Bendix	Own	S 53	Tryon	Alem	19x5.00
Willys-Six 98 B	Morse	Aut-L	*Aut-L	Borg	Own 3	MM	Own ½	4.09	Bendix	Own	S 49¾	Tryon	Alem	19x5.00
Willys 8-80	Morse	Aut-L	*Aut-L	Borg	Own 3	MM	Own ½	4.4	Bendix	Ross	S 56	Tryon	Alem	19x5.50
Willys-Knight 66 B	Morse	N E	*N E	Rock	Own 3	MM	Own ½	4.6	Bendix	Ross	S 57½	Own	Bijur	19x6.00
Willys-Knight 87	Morse	Aut-L	*Aut-L	Rock	Own 3	MM	Own ½	4.89	Bendix	Own	S 53	Tryon	Alem	19x5.50

In the Bus Field

Buffalo, Sept. 12.—A group of Buffalo capitalists are prepared to erect a modern bus terminal at a cost of $2,000,000 if the majority of the seventeen bus lines now entering the city will sign long-term leases to use the property when completed. The attitude of the bus corporations toward this plan is said to be a very favorable one. A site in the heart of the city's business district is said to be under option. A portion of the new building, if erected, would be used as public garage space.

Paterson, N. J., Sept. 12.—Buses operating here carried 1,979,531 passengers during the month of July, and the city's revenue from this source amounted to $4,967.27, according to the report of Rozard J. Polizzotti, supervisor of traffic to the Board of Works. Registered number of passengers carried on buses in July were 1,979,531; estimated number of passengers carried (suburban) 637,063; total number of passengers carried on buses, 2,616,594.

Philadelphia, Sept. 12.—The Philadelphia Rapid Transit Company plans to open a new bus route, to be known as Route Y, to operate between Torresdale and Central Avenues, over Cottman Street.

Lincoln, Neb., Sept. 12.—Local motor bus service is to be given between here and Omaha, Neb., by the Pickwick-Greyhound lines, under authority of the state railway commission. Approval has also been given the transcontinental line for local service between Omaha and Plattsmouth, Neb. The North Platte-McCook and Broken Bow bus line has been authorized to effect certain changes in its present schedule between Broken Bow, North Platte and McCook, Neb.; the C. T. Wilson bus line, between Hebron, Fairmount and York, Neb., and the F. W. Stiles bus company, between Omaha, Ralston and Papillion, Neb.

NOTICE

Please see the fifth column to the left of this advertisement giving steering gear information. Notice the outstanding Ross predominance. The actual figures are:

ROSS

42

NEAREST Competitor

19

SECOND Competitor

8

THIRD Competitor

8

Build Their Own

12

ROSS CAM AND LEVER steering gears predominate not only in passenger car field, but in truck and bus fields as well.

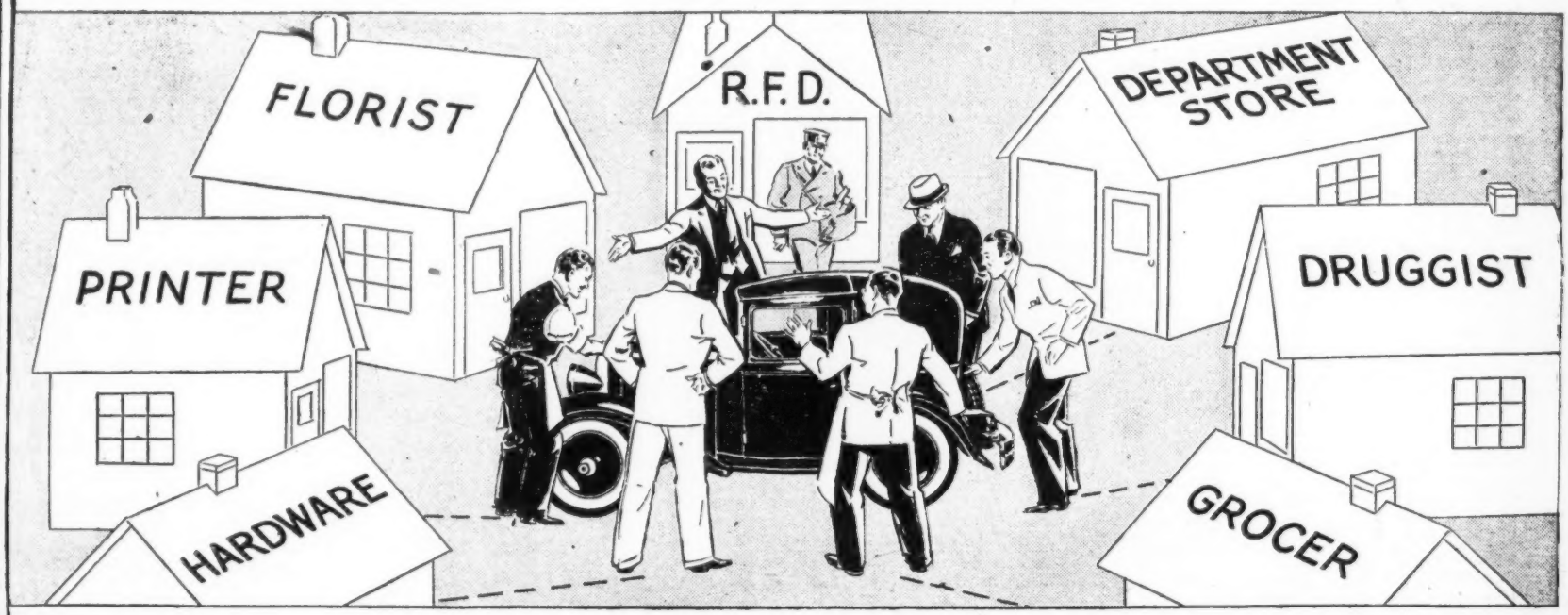
ROSS GEAR & TOOL CO.
Lafayette, Indiana

ROSS
Cam & Lever
Steering

There is only one CAM & LEVER *Steering Gear*

AMERICAN AUSTIN

the bantam–car . . . that will



. . . . provide lowest cost delivery for local merchants

Add this to your list of Austin possibilities—a smart Special Delivery model, listing at $445 at the factory, that delivers the goods for a mere ¾ of a cent per mile for gas, oil, and tires. Ask any local merchant what such a car would do to his delivery costs.

Automobile delivery means a lot to the local merchant. It widens his market, gets him more orders, increases his prestige, and gives him a strong weapon against competition.

His only objection is the cost. Merchants that have delivery service are constantly trying to reduce its cost. Those that haven't give cost as the reason. Judge for yourself the effect that Austin economy will have on both classes.

The delivery model is a smart looking car similar to the coupe with a single seat for the driver and twenty-eight cubic feet of package space right at his elbow. It does forty miles on a gallon of gasoline, a thousand on a five pint filling of oil and twenty to forty thousand on a set of tires.

Its small size means convenience in crowded business districts and store alleys — its speed means quick time to outlying districts. Its reliability, an important point, is attested by eight years of prize winning performance in all parts of the world.

Many a local merchant will use this model to drive to work and back as well. It has interesting sales possibilities.

Contracts for over 200,000 American Austins have been accepted. Write us for information.

IT WILL RUN 1,000 MILES ON

$5.75 WORTH OF GAS AND OIL

AMERICAN AUSTIN CAR COMPANY, INCORPORATED, BUTLER, PENNSYLVANIA

THE AMERICAN *Austin*